THE Soybean Digest

OFFICIAL PUBLICATION • AMERICAN SOYBEAN ASSOCIATION



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JANUARY ◆ 1955

VOLUME 15 ◆ NUMBER 3



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THE SOYBEAN DIGEST

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Objectives of the American Soybean Association include the bringing together of all persons interested in the production, distribution and utilization of soybeans; the collection and dissemination of the best available information relating to both the practical and scientific phases of the problems of increased yields coupled with lessened costs; the safe-guarding of production against diseases and insect pests; the promotion of the development of new varieties; the encouragement of the interest of federal and state governments and experiment stations; and the rendering of all possible services to the industry.

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EDITOR'S DESK . . . . . By GEO. M. STRAYER

ATTACHE SETUP CHANGED FOR THE BETTER

Regardless of the merits of the Wolf Ladejinsky case, it has served to focus attention on our foreign agricultural attaches. And a significant change in the status of the agricultural attaches representing this country in foreign lands took place Nov. 1. Those men, who have been low man on the totem pole in most embassies around the world as members of the staff of the Department of State, are now under direction of and responsible to the U. S. Department of Agriculture. In that move alone are some significant factors for agriculture.

Now the attache will have equipment, travel and assistance with which to work. Instead of a mere statistics gatherer he can now become a salesman for American agricultural goods. Unbridled by protocol and State Department seniority, rank and caste, he will be enabled to do some of the jobs he should have been doing in the past. He can now become the eyes and ears of commodity groups interested in selling to the countries concerned.

The soybean industry, interested in exports of beans and bean products to the greatest possible extent, is now offered an opportunity to work with these men. We must do so. And we should insist that future selections of attaches be made from applicants qualified to serve as salesmen-at-large for our commodity, along with others. We must assist in finding men who are qualified and who are interested in foreign service. We must cooperate with them and assist them in every way possible in doing their jobs. The new system, established by the last session of Congress, makes the Foreign Agricultural Service an important link in the marketing of agricultural products, including soybeans. Let's use it to greatest advantage.

Here Are the Logical Steps to Improve Our Soybean Markets—at Home and Abroad

(From past editorials. See page 6 for discussion of coming hearings on soybean grades.)

Logical steps to improve the export market:

1—The reduction of the allowable foreign material content on each grade by 1 percent, bringing U. S. No. 2 to 2 percent foreign material. This should be easy—soybeans do not normally run above 1 percent foreign material as they come from the farm.

2—Closer supervision of grading agencies. There have been cargoes of soybeans graded out by local accredited grading agencies which should never have been allowed to leave this country. More close supervision by federal agencies, more rigid inspection, more manpower to do the necessary checking and counterchecking are needed. No shipment should be allowed to represent a shipment in world trade unless it has been checked beyond all doubt.

3—A campaign to acquaint buyers with their privileges under the federal grading system, and with the provisions of that system. Our system of selling is unlike any other in the world. We must help our customers to understand it if we are to continue to use it.

4—An aggressive campaign of export selling, promotion and service. We must acquaint the potential buyers with what we have to sell, and we must convince them of the values of it. We must follow actual sales with the type of service assistance that will make permanent customers out of temporary ones.

Logical steps to improve the domestic market:

1—Tighten up federal grading standards, as above.

2—Establish a uniform system of recleaning all soybeans purchased by local buyers, returning the foreign material to the producer for disposal, and paying him on the basis of clean soybeans.

3—Return the cleaners to the combines.

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OVER 69 carlots of soybean dockage accumulated at one time at the New Orleans Public Elevator!

Will Hold Soybean Grades Hearings in February

HEARINGS ON proposed changes in the federal soybean grading standards were expected to be announced momentarily by the U. S. Department of Agriculture as the Soybean Digest went to press.

Exact proposals of the Department were not known. It is expected that the hearings will be held in February.

The hearings, supported by all segments of the industry, are being held at the request of the American Soybean Association.

In order to stop the ever-mounting flood of dirty soybeans to market and to end the confusion in trading that has resulted from buying on a combination of two grades, **ASA petitioned the grain grading branch, USDA, to reduce the allowable percentage of foreign material by 1 percent in each federal soybean grade.** The Association has also requested more adequate inspection of soybean deliveries to foreign markets by federal grading agencies.

President Jake Hartz, Jr., Stuttgart, Ark.; Vice President Albert Dimond, Lovington, Ill.; Executive Vice President Geo. M. Strayer, Hudson, Iowa; Howard L. Roach, Plainfield, Iowa; and Ersel Walley, Fort Wayne, Ind., are expected to represent the American Soybean Association at the hearings.

Support Is General

The National Soybean processors Association has also gone on record requesting the same change in the standards.

The proposals are being backed by the Iowa Farm Bureau Federation, the Illinois Agricultural Association, the Midsouth Soybean and Grain Shippers Association, the Missouri Grain, Feed and Seed Association, and are being studied by some of the other grain handling groups.

The board of directors of the Midsouth Soybean and Grain Shippers Association voted to support ASA's proposals in a special meeting at Memphis December 16. The Shippers Association's decision was based on the fact that since both processors and exporters are buying on the basis of 2 percent foreign material, a 3 percent allowable in No. 2 soybeans does no one any good. The Association reasons that trade practices should correspond with grades.

The Iowa Farm Bureau Federation in its annual convention in November went on record in favor of reducing the foreign material percentages in the grading standards of soybeans and grains "in order that a higher quality product may be delivered to the market," and also in favor of premiums for low moisture content.

The United Grain Co., Champaign, Ill., in a poll of 162 Illinois elevators, found 58 percent of the 86 responding in favor of the proposed changes. Forty-two percent were opposed.

Western Grain and Feed Association has commended to its membership an exhaustive study of the proposed changes. And Farmers Grain Dealers Association of Iowa will devote part of its annual meeting to a discussion of the standards.

The present hearings are the culmination of a long battle by the American Soybean Association, the Processors Association, and others in the industry to clean up marketing practices and to bring about changes in the standards that will place a more merchantable product on the market.

In the Association's view any changes in the standards should reward the careful producer and at the same time result in a product of more uniform quality that will raise the standing of the industry.

Revised In 1949. Last revision in the standards was in 1949 when dockage and foreign material were combined to allow 3 percent foreign material in No. 2 yellow soybeans; and no distinction was made between weed seeds and other types of f.m. such as small particles of soybeans.

The results of this loosening of the standards were not long in coming. Handlers were first to take advantage of it. They began blending beans of high foreign material into lots of clean beans and actual plugging of cars.

But producers were not long in catching on, either. They left the cleaners off their combines after a season or two, and began hauling trash and dirt to town with their soybeans.

Strayer was saying in the Soybean Digest in January 1950, just a few months after the new standards had gone into effect: "Soybeans now reaching the processors are running so close to the maximum levels in foreign material that there is no question about their being field run beans. Cars are being plugged to the maximum level. Flax screenings, grain screenings, other grains, all kinds of material other than soybeans, are being delivered right up

to the permissible 3 percent level.

"Unless we start rewarding the careful producer, stop rewarding the handler who blends junk into good soybeans, we are going to find ourselves with a mess on our hands."

Glenn Pogeler, North Iowa Cooperative Processing Association, says processors have been receiving weed seeds, soil, pods, rocks, wrenches, corn, oats, flax and water along with the soybeans shipped into their plants.

And Central Soya Co., Inc., warned a year ago: "Soybeans have often reached the processor accompanied by a **quantity of foreign material, which if continued, may threaten the quality and eventually the markets for soybean products."**

Everybody Pays. Producers of dirty soybeans may think they have been getting away with something, but actually all producers have been paying all along the line. The market prices of the beans have reflected the cost of shipping and storing the foreign material and for cleaning the junk out of the beans. Buyer resistance has been built up, and our foreign markets have been endangered.

One way or another under the present loose standards buyers have had to deduct for dirty beans. If they do not penalize the producer who brings beans with high f. m. content to market they penalize everybody.

Said Walley at the American Soybean Association meeting in 1952: "A few local elevator men were afraid that their farmers who brought in dirty beans would feel they were penalized . . . Such an elevator man fears to offend the farmers bringing in beans unnecessarily dirty but goes merrily on helping penalize the good farmers who bring in clean beans.

"With country buying prices based on Chicago Board of Trade quotations it is difficult for me to believe that the American soybean producer is not 'taking a licking' of 5 cents a bushel on at least 200 million bushels of beans a year or a total loss of 10 million dollars a year as a result of the high limit of foreign material now allowed in No. 2 soybeans."

And the buyers have not always gone scot free, either. L. E. Kennedy, Kennedy's Grain Elevator, Newton, Ill., at the American Soybean Association convention in 1954, said the buyer often tries to make everybody happy by not docking anybody and hoping the beans will average out. But in years of high foreign material content, "we buyers were getting penalized very heavily for being a good guy for our farm customers."

Dockage at Elevator

Kennedy reported that in 1952 65 percent of his receipts graded below No. 2. On 410,000 bushels handled the excess dockage amounted to 6,406 bushels. At $2.60 per bushel, the total cost of this excess was $16,655.50! This happened at just one country elevator in one year in south central Illinois. And, one way or another, such losses are reflected back to producers.

Exporters Unhappy. Exporters, too, have been unhappy. Said W. B. Fox, C. B. Fox & Co., New Orleans, La., exporter, at the 1954 American Soybean Association convention: "We encountered no serious problem with foreign material until the grading standards were changed in 1949.

"This change in pratice has resulted in our beans being much dirtier than they were, with our product being held in lower value and esteem than the products of competing countries which are cleaner."

Over a period of years the percentage of foreign material in soybeans reaching the terminal markets has been moving steadily upward. Farmers and grain handlers have been taking advantage of the 3 percent tolerance in increasing numbers.



PRESENT STANDARDS are costing producers $10 million annually, said Ersel Walley.

The flood of dirty beans has greatly complicated the problem of congestion at export points.

John H. Wright of the Alabama Grain Elevator Co., Mobile, Ala., reports that of 640 cars shipped to that elevator in November 1953, 289 cars, or 45 percent, graded below No. 2. He said as the cars graded out, there could have been 24.7 cars of foreign material in those 640 cars of beans, most of which had to be hauled in and out of the elevator and screened out of the beans to bring them up to No. 2 beans.

On Dec. 30, 1952, an accumulated total of 103,293 bushels of soybean dockage was on hand at the New

Comments—For and Against

Chas. Schmitt, Rt. 2, Beason, Ill.: With the control of acres on basic commodities the production of soybeans will increase. Therefore, we must look for a larger percentage of the crop to be exported.

The improvement of our soybean grades will be helpful in making beans attractive to foreign buyers.

Ersel Walley, Walley Agricultural Service, Fort Wayne, Ind.: I have grown soybeans continuously for over 30 years. I know whenever soybeans are dry enough to meet the requirements for No. 2 grade they can be harvested with less than 2 percent foreign material. Conditions under which this cannot be done are very, very rare.

Allowing more than 2 percent foreign material in No. 2 beans leads to many abuses. With no premiums for beans with lower foreign material content the grower is naturally inclined to adjust his combine to throw in as much foreign material as possible and still make his grade No. 2.

Since many farmers continue to deliver clean beans it becomes tempting and profitable for handlers to add foreign material—wheat screenings or weed seeds—to bring the foreign material up to the 3 percent limit now allowed.

These practices result in an economic loss to the processor and we kid ourselves when we think otherwise. These losses are overall reflected in a lower price paid to us as growers of soybeans.

Jake Hartz, Jr., Jacob Hartz Seed Co., Stuttgart, Ark.: Most oilseed crops are marketed on a foreign-material-free basis. How else can we expect to be competitive?

We farmers must deliver the best soybeans possible if we expect to hold our markets and continue to build demand with increased production.

Albert B. Dimond, Lovington, Ill.: Lowering allowable foreign material

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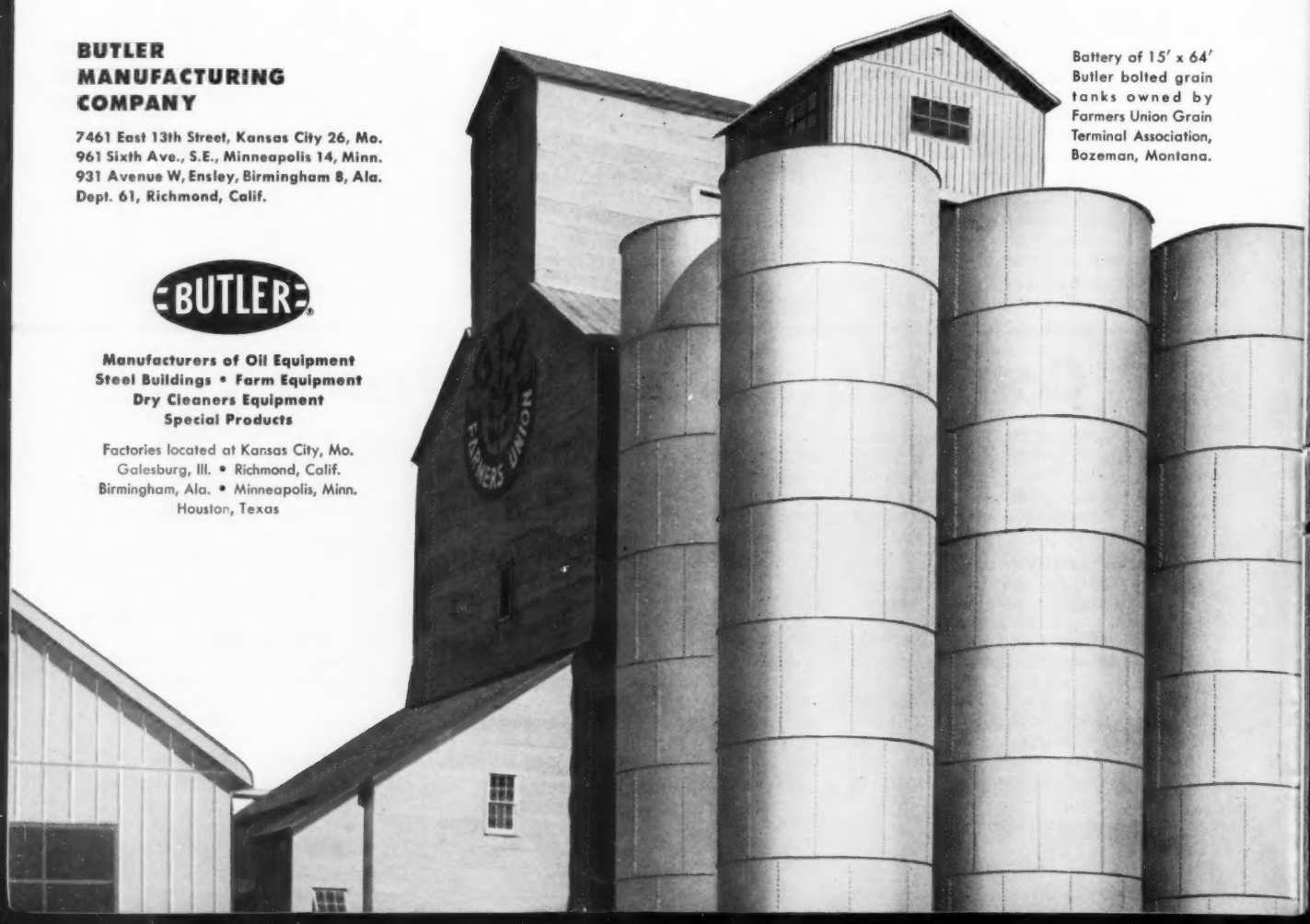
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Orleans Public Elevator. This material had been screened from the arriving soybeans to keep them up to contract specifications. This amount was equal to 69 carloads (1,500 bushels each), all of which had accumulated in one elevator!

On Jan. 22, 1953, the New Orleans elevator reported 357,678 bushels of soybean dockage on hand. This was in excess of 3 percent allowable foreign material for No. 2 grade.

Handling and freight charges had been incurred on all this waste, shipping space was utilized, storage space was used, and cleaners were tied up, thus slowing down all elevator and transportation operations at a time of heavy crop movement.

European Complaints. Reports of growing irritation in Europe over the quality of U. S. soybeans became frequent. Strayer found intense dissatisfaction when he went to Europe in 1949. He quickly warned that we would have to take corrective measures or lose our foreign markets altogether.

He wrote: "(In Europe) we have done everything possible to spoil our market hopes. Cargo after cargo of soybeans of definitely inferior quality have been sent into Central Europe. Dockage, damaged beans, cracked beans and foreign material have been way out of line. Cleaning losses have been far in excess of reasonable expectations. Poisonous materials have been included.

"It's time for us to clean up the junk."

Europeans complained about poisonous weeds, often far too high in content for safety. And there were disputes over analyses. For years soybeans consistently arrived in Europe with a far higher foreign material content than was shown on the grading certificates when shipped.

Japanese buyers made much the same complaints.

Processor Step. Soybean processors, in order to protect themselves against the big volume of foreign material coming to market, changed their buying practices beginning with the 1953 crop, so they were buying on the basis of No. 1 grade on some factors and No. 2 on others. They were using the 2 percent foreign material limit of No. 1, with No. 2 factors prevailing on such items as splits and test weight.

This step added to the confusion in the trade. Since futures contracts are written on the basis of No. 2 grade, processors have been buying on No. 1 basis, but hedging in No. 2.

Grade Factors. In soybeans the only grading factors of real significance are foreign material and moisture. The higher the content of either one, the lower the meal and oil content that will result from processing the beans.

The effects of test weight and split and damaged soybeans in commercial lots is not great.

ASA is asking for a grade change to allow lower foreign material content in each grade. But the Association believes that moisture content can be handled better through a change in trade practices rather than in the grades.

Much of a case can no longer be made that tightening up the standards will penalize the soybean buyer. As Loren R. Larrick, United Grain Co., Champaign, Ill., points out: "Reducing the allowable limits of foreign material of each grade by 1 percent would in no way change the present limit of foreign material in beans now being marketed. It would simply change the grade designation from No. 1 yellow soybeans 2 percent foreign material, to No. 2 yellow soybeans 2 percent foreign material. **It would also appear to simplify soybean trading in that beans could again be marketed on the No. 2 basis.**"

Comments

1 percent in each numerical grade of soybeans certainly will get better beans to market. Producers just don't like discounts.

Domestic processors have solved the problem as far as they are concerned by putting out bids on No. 1 beans which have 2 percent foreign material. Foreign buyers get the junk. I believe we need to treat this foreign market with reverence. The bean business will go to pot without it.

John E. Brown, Cypress Supply Co., St. Louis: I have yet to see a place where soybean processing mills burn or destroy the foreign material which they deduct on settlement sheets.

As far as the export market is concerned, beans must be cleaned anyhow, and the extra cent one way or another on the grading standard would only tend to increase the difficulty for exporters. There is virtually no relation between our world market position and the quality of beans produced, when the exporting terminals have facilities for removing foreign material.

D. G. Wing, Mechanicsburg, Ohio: I have always taken pride in growing clean soybeans (about 400 acres each year). Consequently it burns me up to have the elevators use my beans to blend with someone else's dirty beans so as to keep their grade within 3 percent foreign material.

I am sure that a new grade standard of 2 percent foreign material

will help the industry clean up a bad situation.

Eldon Anderson, manager Farmers Cooperative Co., Pocahontas, Iowa: I have long been associated with that group that opposed changes, but so long as processors insist on basing their bids on No. 1 yellow beans I see little reason for opposing the change recommended by the Association.

If proposals to change grade standards are effected to reduce foreign material and dockage I certainly think some consideration must be given to that broken part of the bean which passes through the screen and thus qualifies as dockage.

I have often questioned the grades on cars of beans that I have shipped and in every case where a sample of the inspection was returned to me I would say that half the sample was broken beans. This condition is worse today, since so many of us operate concrete houses, where the additional fall tends to increase breakage.

M. D. Guild, manager, Indiana Grain Cooperative, Indianapolis, Ind.: It would have been much better if domestic processors had bought on a two yellow basis and paid premiums for better quality. As a result the bulk of the crop in this area moved at a discount with no premiums.

Tightening of the standards will force terminal elevators out of the market unless beans are selling greatly under the futures market. We must not lose this important outlet. What we need is standards that will increase the number of buyers, not reduce them.

I think the producers' interests will be served by maintaining present standards and not tightening them.

D. A. Meinershagen, executive secretary-treasurer, Missouri Grain, Feed & Seed Association, Higginsville, Mo.: It would appear that when both the producer and the user of a crop agree that changes would benefit the industry the men who handle the crop—the intermediaries—should agree to any reasonable proposal. They have little to gain or lose from a grade change. They merely buy from one group and sell to another, with no change in the form of the commodity.

When public hearings are held it is our hope that grain men—who have as much at stake in the longtime welfare of the industry as any other one group—will support the proposal. Any immediate loss due to need for more trained help in determining grades will be far overbalanced by the longtime progress which our industry will achieve by returning to a basis of selling soybeans rather than foreign material.

Paul C. Hughes, Farmers Soybean Corp., Blytheville, Ark.: I feel the grade change will do no one except the processors any good. The exporters will have a harder time making a No. 2 soybean in the boat. Except for getting the grades in line with buying practices it will serve no real purpose.

I do think that a discount system as used for exporting soybeans here in the Midsouth if used all over the country would clean the crop up and pay the good producer.

As long as any foreign material is allowed and nothing is charged to clean the foreign material out of the soybeans why should a farmer want or need to clean his crop?

K. J. Maltas, manager grain department, A. E. Staley Manufacturing Co., Decatur, Ill.: Processors tend to base their prices on the average quality received—and thus the man with good grain has to carry part of the load for the man with the poor grain.

It is our belief that the USDA should amend its grading standards and require official inspectors to classify the type of damage in soybeans. The difference in milling value between so-called field damage and heat damage is considerable. Any bean showing a light brown to dark brown color in the meats should be classed as heat damage.

A. M. Convis, soybean division, Funk Bros. Seed Co., Bloomington, Ill.: The soybean processors for the past two years have been basing all their bids to the country elevator on the No. 1 grade, allowing, however, 20 percent splits and 54 pounds test weight. Any change that would be made at this time would not materially affect the operation that the elevators have been doing the past two years.

We have always felt that if the country elevator would explain to its farmer customer that there was only 2 percent foreign material allowed and discount for anything above that, the farmers themselves would eventually straighten out this matter.

TO COMMODITY EXECUTIVES

We do not have a magic crystal ball.
We do not read tea leaves.
We do not possess mystic charts.
We do not write about the past.

Our letter is packed full of commodity facts together with a condensation of this week's most important commodity news, plus our interpretation of its meaning from a market standpoint. It is published by persons with years of successful commodity experience, to assist you in arriving at broad and profitable business conclusions.

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THE COVER PICTURE

LIKE THE REST of the nation's 200 soybean processors, A. E. Staley Manufacturing Co., Decatur, Ill., keeps a close check on the quality and condition of the beans in its plant.

The picture shows Ralph McClintock of the Staley grain department scooping up a sampling handful as they are carried on the belt to storage bins.

The beans are watched as long as they are in the bins. Their location in the bins, and their condition from day to day, are checked and all information recorded on a big board in the superintendent's office. By watching this board, supervisors can tell what is going on all over the house and can follow any batch of grain through.

Information on the board is continually being changed as the foremen get information from samplers and ammeter reports.

Photo is courtesy of Staley Journal.



Ben T. Gildersleeve

International Winner

BEN T. GILDERSLEEVE, Hudson, Ill., won the soybean championship at the International Grain and Hay Show, held in Chicago Nov. 26-Dec. 4.

Gildersleeve is also a previous winner.

Reserve champion in the soybean exhibits was Clifford Dale, Glanworth, Ontario.

Dale placed first in regions 1 and 2. Second place winner was William R. Beattie, Staples, Ontario.

First place winner in regions 3 and 7 was Charles McKay, Alexandria, Ind. Second place winner was E. W. Doubet, Hanna City, Ind.

First place winner in regions 4 and 8 was Gildersleeve. Second place winner was Eugene Gwaltney, Gaston, Ind.

Poor Report on Ogdens

NORTHEAST Louisiana farmers who planted only Ogden soybeans in 1954 suffered severe damage due to July and August drought and heavy shattering loss at harvest time, C. A. Rose, county agent at Lake Providence, La., reports.

Producers who planted more than one variety of beans, with different maturity dates, prevented much of the loss.

Over three-fourths of the soybeans planted in the area were of the Ogden variety. The remaining acreage was largely divided between Volstate, Roanoke, Mamotan and Dortchsoy 31.

Ogdens, usually good producers, did not yield nearly as well as the later maturing beans, which gave a good account of themselves.

Good Seed Demand

In all probability good soybean seed for planting purposes will be in good demand prior to the 1955 planting season, according to W. H. Freyaldenhoven, extension agronomist at Little Rock, Ark.

Freyaldenhoven said with acreage controls on cotton and rice, it is believed that the soybean acreage in Arkansas will be increased.

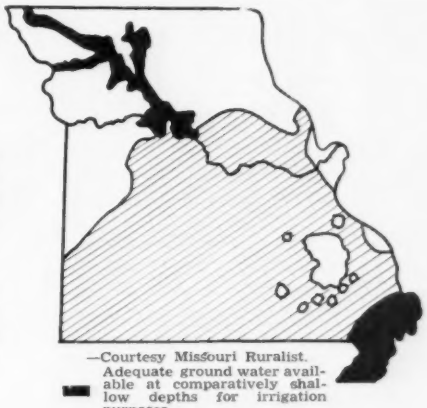
Irrigation in Texas

IRRIGATION tests of five different soybean varieties under Texas conditions this year resulted in an average 30-bushel yield, reports Ben R. Burkholder, Pecos, Texas.

The varieties tested in five to ten-acre plots were Roanoke, Ralsoy, Ogden 302, Volstate and Dorman. All plots were watered four times, not counting a pre-plant irrigation given Roanoke and Ralsoy. All were row irrigated. Yields were similar in all varieties.

"Except for the size the plant attained, the beans did very well," writes Mr. Burkholder. "Volstate and Roanoke were late in putting on beans and we made hay out of the Volstate on the 20th of August. Then we were told that some varieties do not begin to fruit until Sept. 1, so we left the Roanoke and sure enough they did begin to fruit.

"Dorman did fine, but it was watered after planting. Ralsoy and Ogden were about ripe for harvest when it rained on them and as a consequence there was a lot of shattering. A 30-bushel yield was the average, but this was obtained by including the estimated shattered seed on the ground."



—Courtesy Missouri Ruralist.

Adequate ground water available at comparatively shallow depths for irrigation purposes.

Adequate ground water available at deep depths.

Ground water doubtful or mineralized.

IRRIGATION is completely feasible in the heavy-soybean-growing territory of southeast Missouri, according to the above map, which shows irrigation water supplies in the state. The Bootheel has the most water readily available. The Ozarks region to the north and west has good water available but at much greater depths.

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AMERICAN SOYBEAN ASSOCIATION

Late News

Vol. 2, No. 31

Hudson, Iowa, Jan. 6, 1955

Published 32 times yearly as a service to the soybean industry.

1955 PRICE SUPPORTS

A report was circulating in Washington as the Soybean Digest went to press that the U. S. Department of Agriculture had figured on a soybean price support for the 1955 crop of 75 percent of parity, and a cottonseed support of 65 percent of parity.

The Department of Agriculture will call a meeting for about the middle of January, we are told, when interested industry groups can be heard.

The American Soybean Association has asked for continuation of soybean support prices at the 80 percent of parity level for the 1955-crop year.

In announcing the action Executive Vice President Geo. M. Strayer said such support will encourage soybean production in 1955 and assure needed tonnages of soybean oil meal. **He said farmers should not now be penalized because they took a voluntary cut in price support levels for soybeans a year ago, ahead of the producers of other non-basic crops.** (For a more detailed discussion see Washington Digest on page 32.)

JANUARY MOVEMENT?

How big will the January soybean crop movement be? A few observers claim the 1954 crop was over-estimated and not so many beans remain in storage as is generally believed. But our reports indicate a large volume is in storage—**perhaps over two-thirds of the crop in northern areas,** and somewhat under a third in the Mid-south. Apparently the volume in storage in the Southeast and also in Kansas and Oklahoma—badly hurt by drought—is quite small.

But most sources are cautious about predicting a heavy January movement. **They say farmers are still holding for $2.75 to $3 and are prepared to seal if they have not already done so.** Exceptions are beans of high moisture content that will have to be moved before warm weather.

In some localities other crops rather than beans are being sold. Chester B. Biddle, Biddle Farms, Remington, Ind., says oats are moving in his area because of lack of confidence in the oat market. **He believes most operators holding corn or beans are in rather satisfactory financial position,** since they have already marketed their surplus in these crops..

J. E. Johnson, Champaign, Ill., reports driblet selling in his section through December. He does not expect heavy January sales. Johnson says corn has been selling rather freely and this may be a factor in the slow movement of beans. **Johnson believes far more producers than in the past are speculating in the soybean market.**

Clark Norstrum, Carlson & Norstrum Grain Co., Fort Dodge, Iowa, says about 90 percent of the stored beans are sealed in his area, and will be held for $2.85-$3. Some farm-stored beans may not keep through warm weather, he believes.

J. W. Huegely, Huegely Elevator Co., Nashville, Ill., thinks wheat will be sold rather than beans in his section, as wheat is now at about the loan price.

But one Illinois observer believes it is **more logical to hold corn and sell beans, since beans are currently 35 to 40 cents over the loan price and corn is 20 cents under.** Sealing corn is a sure deal, but not beans.

L. R. Brewster, General Mills, Inc., Rossford, Ohio, reports price inquiries indicate a growing concern among producers about moving beans rather soon. He believes beans will move ahead of other crops in northwestern Ohio because:

1—They are the highest-priced crop at present.

2—Farmers with high-moisture beans want to move them before warm weather.

Ersel Walley, Walley Agricultural Service, Fort Wayne, Ind., says a market price scare is possible but not likely. If it happens a lot of corn and beans will be dumped. **"We estimate 30-40 percent of 1954 crop is in hands of producers who will hold for $3-$3.50 or bust."**

Dixon Jordan, Standard Commission Co., Memphis, expects some selling for tax reasons in the Midsouth, where he sees about 30 percent of the crop as still in storage. And he reports some beans are going out of condition. **But he expects the best movement in April and May.** Jake Hartz, Jr., Stuttgart, Ark., says few beans are in storage except for seed.

A considerable part of the present light movement is going for export in the North, with some export movement reported from Illinois, Ohio and Iowa. A lack of beans of exportable quality in the South is reported to be a factor in this movement. Some northern beans are being bought for blending purposes.

PROCESSOR OPERATIONS

Bureau of Census report shows 22.2 million bushels of soybeans were processed in November, **about a normal operation.** Receipts at processing plants totaled 85.4 million bushels for October and November, about a million bushels less than last year. And processors had 51 million bushels on hand Nov. 30, about a two-months' crush. Processors apparently are operating at about 80 to 85 percent of capacity with some long holiday shut downs.

GERMINATION OF SEED

Reports of low soybean seed germination are coming to us from Indiana and Ohio. K. E. Beeson, Purdue University, says 30 percent of 500 samples already tested have fallen below the 80-percent-germination requirement for good seed, and 10 percent below 70 percent germination. In many cases, low germination can be traced to samples with moisture above 14 percent.

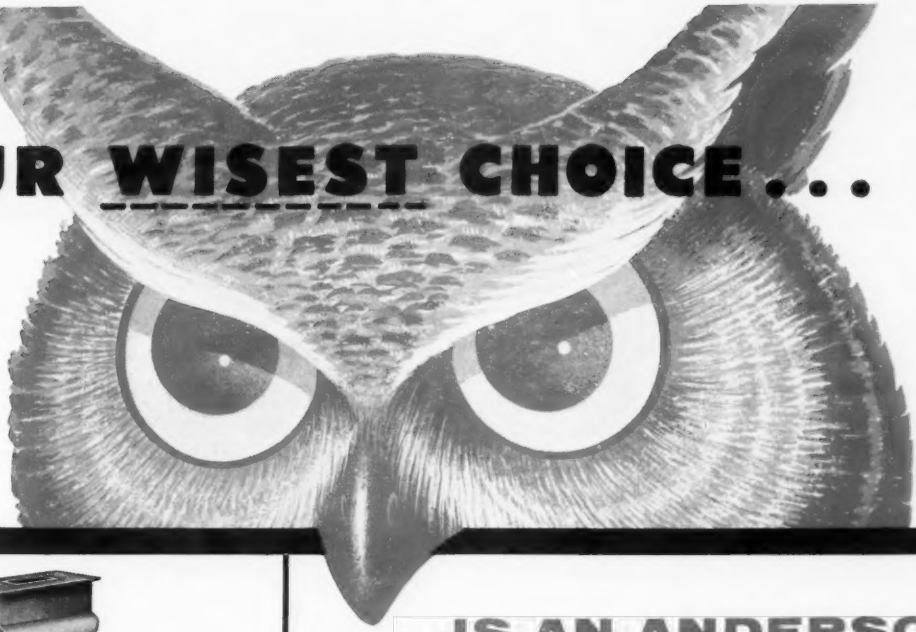
Geo. K. Black, J. A.. McCarty Seed Co., Evansville, Ind, reports a wide variation in seed germination, with more samples below 80 percent than above. And Walley says germination is 60-65 percent on beans that were harvested early with a moisture content of 11 to 11½ percent.

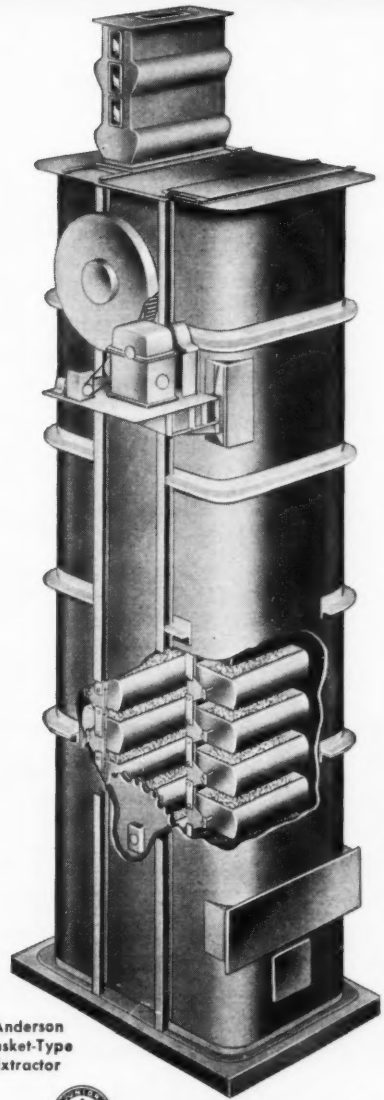
Hartz looks for a heavy demand for seed beans in the South this year, with a good premium for top quality seed. He says some poor quality seed is moving now at reduced prices.

	Cash price to farmers for No. 1 soybeans December 30	Price to farmers for No. 2 soybeans December 30	Price to farmers for bagged soybean oil meal December 30
Ala.	$2.65		$80
Ark.	2.63	$2.60	
Ill.	2.63@$2.72	2.65@$2.70	85@$86
Ind.	2.63@ 2.64	2.62	90
Iowa	2.55@ 2.60		90@ 91
Kans.	2.57		85
Minn.	2.51		80
N. C.	2.70	2.60	
Ohio	2.66@ 2.74*	2.70*	
Okla.	2.50		
Tenn.	2.65		85

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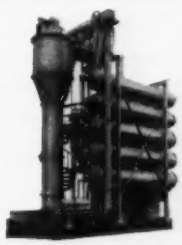
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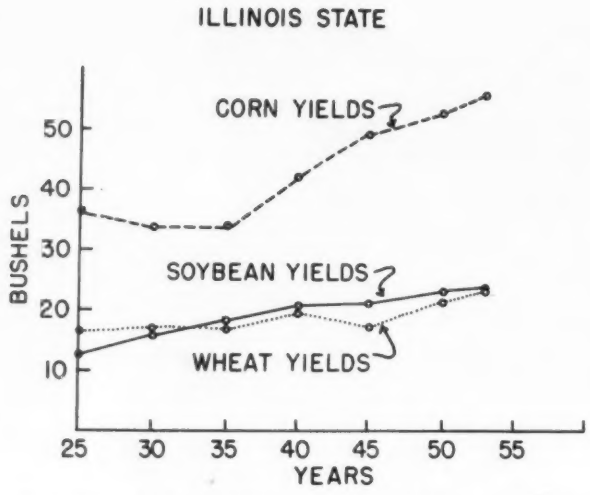
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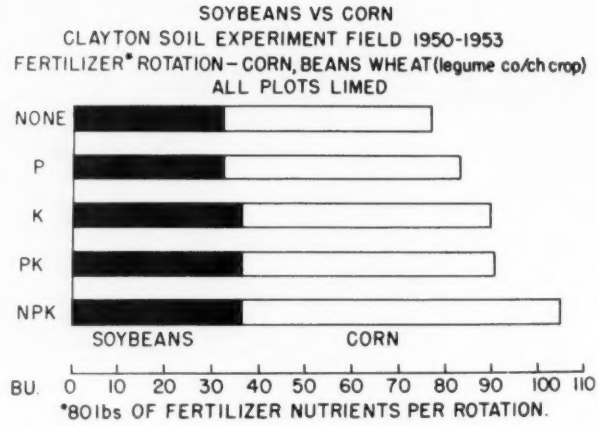
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CROP YIELDS for the past 28 years in Illinois. Soybeans and wheat yields have not kept pace with corn yields.



POTASH produces a response in soybean yields, but not nearly so great as in corn. Corn also responds to phosphorus, but soybeans don't.

Response of Beans to Fertilizer

BY A. L. LANG
University of Illinois

Professor Lang points out this conundrum:

1—Soybeans make a heavy demand on soil nutrients.

2—But they usually make little response to direct fertilization.

Why?

IMPROVED varieties and cultural practices have increased average yields in Illinois. These increases have not kept up with corn during the last 20 years and yields while profitably big are still disappointingly low to the research worker.

We have had 50 years of cultural studies with the soybean plant. Fertilization, a phase of these studies, has not been as productive of positive results as has been the case with most other common farm crops. This experience has been shared by most of the soybean growing states. Our efforts, however, have not been entirely fruitless for I believe from these experiences we can tie down some things which can be helpful in the growing of soybeans.

In general we know that soybean yields are affected by the natural productivity of the soil. They are also affected favorably by systems of management which improve the productivity of a soil as measured by the yields of other crops. Likewise fertilizers which make up deficiencies as shown by either soil tests or plant symptoms will give profitable increases in yield for direct applications, providing the deficiencies have not been adequately made up for preceding crops. Soybeans themselves also affect the productivity of the soil on which they are grown as measured by the yields of succeeding crops. This is a very important phase of soybean culture since the effect varies widely with the handling of the soybean crop and may alter considerably the fertilization plans for succeeding crops on the farm.

While soybeans do respond to good systems of soil management and to applications of fertilizers which make up deficiencies and in most cases these responses are profitable, the problem confronting most workers in this field is the fact that relatively speaking or percentage-wise the magnitude of the response is not as great as that with most other common farm crops. In this connection we have observed in our work that the soybean plant tends to give vegetative growth response to fer-

Soybeans Response to Soil Productivity

12 Yr. Ave. Yields 1942-1953

Soils	Treatments	Yields Bu. Soybeans	Corn
	None	26	58
(5)	Lime	30	
Dark	L. Phos.	30	
Colored	L.P. Potash	32	91
	None	12	22
(4)	Lime	14	
Light	L. Phos.	14	
Colored	L.P. Potash	23	68

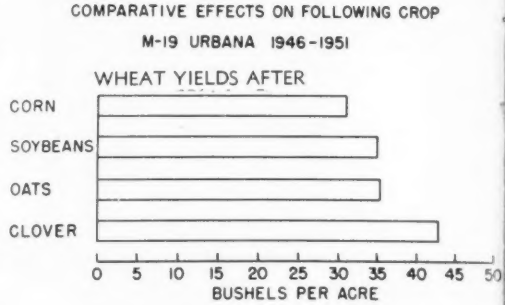
RESPONSE of soybeans to systems that increase the yields of other crops. On dark soils soybeans showed a 30-percent response, corn 60-percent. On light soils, the response of soybeans was 90 percent, corn 200 percent.

CHEMICAL COMPOSITION OF SOME FARM CROPS IN ILLINOIS*

Crop	Grain Bu.	Nitrogen	Phosphorus	Potassium	Calcium	Magnesium
Corn	100	97.4	13.4	24.6	5.0	9.0
Oats	50	31.2	4.0	12.8	2.2	3.0
Wheat	25	21.6	3.6	9.3	1.0	2.7
Soybeans	25	95.4	5.3	28.0	3.8	4.2
Alfalfa	(1500#)	43.5	2.7	29.0	27.0	6.4

Bulletin 539—University of Ill.—1950, page 560.

SOYBEANS contain four times as much nitrogen as grain crops and two times as much nitrogen as alfalfa. They contain twice as much phosphorus as grains and alfalfa; and four times as much potash as grain and the same amount of potash as alfalfa.



WHEAT YIELDS are better following beans than following corn. They are the same following either oats or soybeans, but best following clover.

tilization rather than fruit or seed production response. This may be a physiological or genetic characteristic of the plant which will have to be altered before maximum seed production response can be obtained. Until such alterations are achieved this characteristic of the crop should be taken into consideration in cultural practices aimed at increasing yields.

A look at the chemical composition of corn, oats, wheat, soybeans, and alfalfa reveals nutrient requirement relationships that need to be given careful consideration in fertilizer and soil management practices aimed at keeping soil, on which soybeans are being grown at least part of the time, in a high state of productivity. It is apparent from such a study that soybeans have a relatively high nutrient requirement. The nitrogen content is four times as high as in the grain crops and twice as high as that of alfalfa. In phosphorus the soybean is twice as high as corn and higher than that of the other mentioned crops. With the exception of alfalfa it is much higher in potassium, calcium, and magnesium than the other crops.

This kind of information can lead to only one conclusion. Regardless of response, soil from which soybeans are removed regularly in a diversified cropping system must have plant nutrients in the form of fertilizers returned either directly for the soybean crop or otherwise in relatively greater quantities than for most other crops in the system.

This relatively high requirement of the soybean plant for nutrients makes the lack of relatively high response to fertilization an even more perplexing problem.

These relationships likewise, present an open and rich field for research into the physiological, genetic, and nutritional mysteries tied up in this great and valuable crop.

Need More Protein

BACK in 1924 American farmers harvested just under 5 million bushels of soybeans. This year our soybean production is estimated at record-breaking 338 million bushels, with a market value of some $800 to $900 million," Secretary of Agriculture Ezra Benson told the American Agricultural Editor's Association in Chicago.

"Thus in the short space of three decades we have seen the development of a new major crop in this country and with it a major industry. The versatile soybean has a wide variety of uses, from paints to plastics, from human food to livestock feed.

"Like most major crops, the soybean is not a native American plant. Yet it is well adapted to growing conditions over wide areas of this country. It found a great new and untapped market here.

"American agriculture could well use another source of high protein feeds to supplement those produced from soybeans and other oilseeds. Our growing livestock population, along with the increasing popularity of such feeds, promises a ready and expanding market."

Banks Head Passes

Percy H. Caris, president of William H. Banks Warehouses, Inc., for 26 years, passed away suddenly at his home in Chicago on Dec. 4. He had been a leading figure in the development of inventory financing, and was widely known throughout the soybean industry.

A native of Mt. Pleasant, Iowa, Mr. Caris was a graduate of Iowa Wesleyan College there, and had been a trustee of that institution for the last 10 years.

David H. Coffman has been elected president to succeed Mr. Caris. Mr. Coffman has been associated with the firm for 16 years, and as its executive vice president for 10 years.

He is well known in the soybean industry as he was associated with one of the soybean procesors some years ago and he has attended most of the American Soybean Association meetings since his connection with Banks.

William H. Banks Warehouses, Inc., has served the industry for many years. It has the distinction of being the originator of the field warehousing system of financing soybean and other inventories.



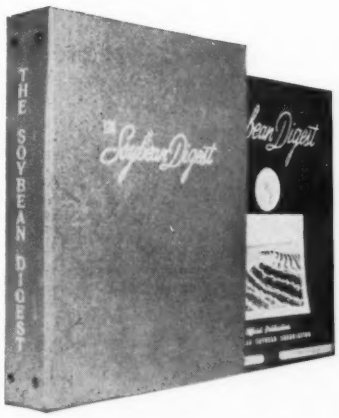
David H. Coffman

Margarine Report

MARGARINE production in October kept up a record pace, setting a new mark of 1,113,276,000 pounds for the 10-month period ending Oct. 31, according to S. F. Riepma, president of the National Association of Margarine Manufacturers.

Output in the comparable period of 1953, a record margarine year, was 1,077,093,000 pounds.

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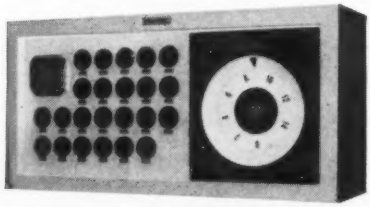
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CHECKING

storage temperatures

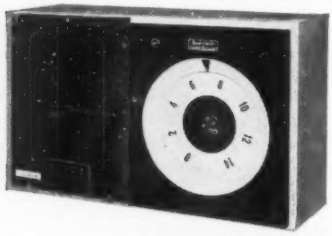
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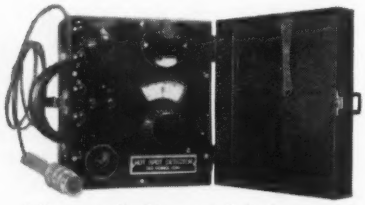
Minneapolis-Honeywell instrument

Switch-controlled unit lets you scan through temperature stations that give measurements at every 6-foot level in bins. The measuring instrument is a Minneapolis-Honeywell *ElectroniK* Potentiometer, developed especially for the Hot Spot system. It's highly accurate and sensitive . . . responds to temperature changes as small as one-fifth of a degree Fahrenheit.



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Minneapolis-Honeywell instrument

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Instruments, for Hot Spot Detector Systems, are made exclusively by Minneapolis-Honeywell . . . *First in Controls*

Expanded Program By Chemurgic Group

A vigorous new effort to expand the nation's chemurgic research program was announced by Henry T. McKnight, president of the National Farm Chemurgic Council, Inc.

The 19-year-old non-profit group, comprising representatives of industry, agriculture and science, has been sponsoring an educational and scientific research program to develop additional non-food uses of agricultural products.

Under the expanded program announced by Mr. McKnight, its activities will be broadened to include the whole field of agricultural research in production and marketing as well as utilization. The group's board of governors also voted to recommend a change in the organization's name to the Council for Agricultural and Chemurgic Research.

Members of the "Blueprint Committee" included Dr. K. Starr Chester, supervisor of agricultural research at Battelle Memorial Institute; Howard L. Roach, president of J. Roach and Sons; Edmund Cook, vice president, John Deere and Co.; W. Rhea Blake, executive vice president, National Cotton Council; D. Howard Doane, chairman, Doane Agricultural Services; and Mr. McKnight.

New Feed Group Head

DAVE D. MARTIN, manager, Ocoma Feed Mills, Elkhorn, Nebr., was elected president of Feed Institute, Inc., Des Moines, for the coming year. The announcement was made by Wayne R. Johnson, Johnson Brothers Mills, Shenandoah, Iowa, retiring president.

Frank T. Lee, C. L. Lee & Sons, Ida Grove, Iowa, is the new vice-president. Albert Guggedahl, Des Moines, continues as managing director.

Members of the board of directors include Herman Jensen, Golden Sun Milling Co., Estherville, Iowa; Fred Andresen, Northwestern Distributing Co., Mason City, Iowa; James L. Roach, J. Roach Sons, Inc., Plainfield, Iowa; Don W. Hunter, Pillsbury Mills, Inc., Clinton, Iowa; Columbus F. Hayes, A. D. Hayes Co., Mt. Pleasant, Iowa; Hugh Gordon, the Gordon Hatchery, Marion, Iowa; C. M. Bodensteiner, Fort Dodge By-Products, Inc., Fort Dodge, Iowa; Harold W. Grassl, the Tanvilac Co., Inc., Des Moines; and Wayne Johnson, Shenandoah.

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Here's a New Record:

63.6 Bushels in Indiana

TOM MADDOX, a young farmer of Benton County, near Otterbein, not only replaced his father as the soybean yield champion of Indiana, but in 1954 grew the biggest acre yield in the 15-year history of the contest. Announcement of this record breaker of 63.6 bushels per acre was made by K. E. Beeson, Purdue University agronomist, at the annual soybean day program at Remington.

Tom's success was not without serious competition from his father, State Senator Charles Maddox, who produced 55.2 bushels per acre on a nearby farm, for second place in the contest.

Third place honors went to Carl Fritts, Demotte, Jasper County, with 53.8 bushels. Chester Biddle of Benton County with 52.9 bushels tied Gene Gwaltney of Delaware County for fourth place honors. Gwaltney was 1945 state champion with a yield of 51.9 bushels. Previous high yield in the state contest was 61.8 bushels grown by George Shell of Madison county in 1949.

The 63.6 bushel yield topped those reported from 109 contestants in 20 counties this year.

Conducted by the Indiana Corn Growers Association and Purdue University Extension Service, the state five-acre contest is on production from at least five measured acres from the entire field.

In discussion with leading soybean growers on the Remington program on how to raise big yields of soys, Maddox reported that 500 pounds of 0-10-20 fertilizer were plowed down in 1954. The field had been adequately fertilized in 1953 for seed corn production, which had followed clover and alfalfa used only as a green manure crop. According to County Agent E. M. Christen, the available phosphate level was 140 pounds per acre, the potash 180, and the pH 6.0. In a four-year rotation of corn, soybeans, grain and alfalfa mixture, Maddox used liberal fertilization on the grain crops. In 1954 a favorable growing season caused heavy podding on the Hawkeye variety grown in his contest field for certification, according to Maddox.

Farmers listening to the discussion felt that stepping up the number of rows per acre was important in contributing to the high yield. Maddox bought two discarded "horse and buggy day" farm tools at a sale and adapted them for 24-inch row planting. One was a four-row corn planter, and the other a sugar beet cultivator. He adjusted these to his power equipment and was able to plant and cultivate in closer rows than is possible with most present day equipment.

The Hawkeye, with its excellent upright habit of growth, is a good variety to grow in narrow rows, Maddox says. His entire field of 30 acres produced a 50-bushel yield.

Joining in recognizing this record accomplishment at the Remington program was Geo. M. Strayer, Hudson, Iowa, secretary-treasurer of the American Soybean Association. Chester Biddle of Remington is former president of the Association.

A part of the day's program at Remington was a show of 100 samples of soybeans in the various classes. They were judged by Charles Bowman, seedman of Valparaiso, and James Baynes, manager of Purdue Ag. Alumni Seed Improvement Association. This soybean show is sponsored annually by the Remington Service Club, the local vocational agriculture class and cooperating county agents. It celebrates a crop unknown in the area 30 years ago which now makes Remington the center of one of the most concentrated soybean producing and marketing areas in the United States.



Tom Maddox

Remington Champion

Jack Luck, Remington, Ind., was grand champion exhibitor of the Remington Soybean Show for the fourth consecutive year. He was champion of the open class division.

Other division champions were: James Flickner, Remington, farmers division; Glen Kinsell, Remington, certified seed division; Jim



Dluzak, Remington, vocational agriculture division; Lois Ann Shively, Remington, junior agriculture division; and George Schulte, Jr., Oak Grove, Robert Berenda, Goodland, Larry Roberts, Wolcott, and Martin Knapps, DeMotte, county 4-H club champions.

Taking part in a panel on soybean production were John Like, Charles Maddox, Tom Maddox and Willis Witrick, all Indiana state soybean yield champions or who had placed high in the state contest; and A. H. Probst, Purdue University agronomist.

Like, who produced a 42-bushel yield in 1939, said he used 21-inch rows and fertilizer in the rotation but not on soybeans. He used a heavy rate of seed planting.

Charles Maddox, who topped the Indiana contest with 48 bushels in 1953, said he considered the fact that he planted early—May 15—very important. He used a heavy rate of planting on land with a high fertility level and used some fertilizer as a starter. He also plowed down some fertilizer. Maddox went back to 24-inch rows in 1954.

Witrick, who produced 46 bushels in 1954, recommended fall or early spring plowing. He plowed down 350 pounds of 0-10-30, and used 100 pounds of 0-20-20 as a starter. Witrick planted with a corn planter and set the marker in 10 inches, making a 38-inch average spacing. His variety was Hawkeyes. The seed was planted at the rate of five pecks per acre. He cultivated with a rotary hoe.

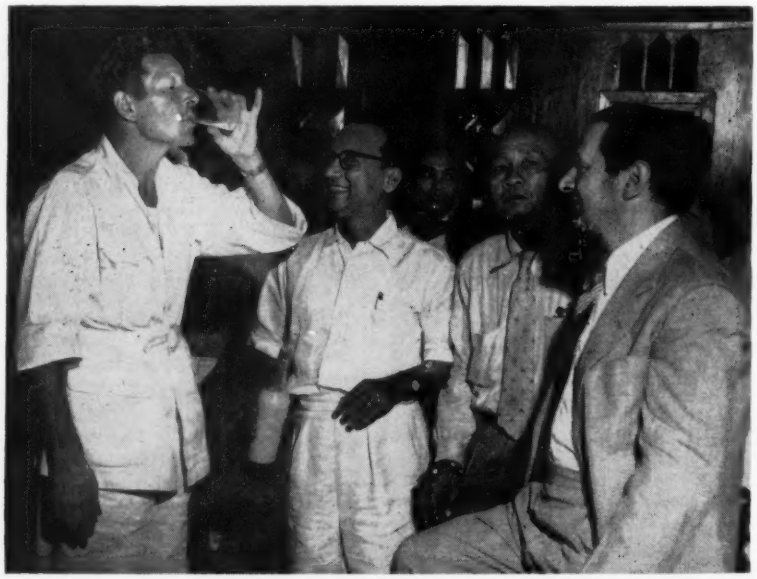
Probst said highest yields were obtained in 24 to 28-inch rows, which yield about 12 percent above 40-inch rows.

Probst said full season varieties require early planting in northern Indiana, but early varieties can be planted later. He considers fall plowing better than spring plowing, he said.

The Clark variety outyields Lincoln by 17 percent at Lafayette, Probst said. He pointed out that Clark must be planted early to assure maturity as far north as Lafayette. Performance of the Canadian variety, Hardome, has been very poor in Indiana, but that of Harosoy has been very good. Chippewa, Norchief, Acme and Comet are all varieties that are far too early for Indiana.

Twenty Indiana county yield contest winners last year are:

Name	County	Yield	Variety
Tom Maddox	Benton	63.6	Hawkeye
Dennis Porter	Carroll	50.1	Clark
Jesse Martin	Cass	47.6	Clark
Vernice Schopmeyer	Clay	45.6	Hawkeye
Donald Johnson	DeKalb	29.6	Blackhawk
Eugene Gwaltney	Delaware	52.9	Clark
Harold F. Cross	Gibson	36.6	Clark
Maurice Woodward	Hancock	42.7	Harosoy
Carl Fritts	Jasper	53.8	
Anton F. Dahl	Lake	48.4	Harosoy
Elburt F. Place	LaPorte	44.7	Harosoy
Maynel Martin	Madison	45.5	Hawkeye
Nettie Musgrave	Morgan	38.3	Lincoln
Cecil R. Hartman	Rush	42.3	Lincoln
Gibson Gray	Shelby	37.0	Lincoln
John F. Allen	Sullivan	42.9	Hawkeye
Max Lenderman	Vigo	48.5	.....
Wilbert Buente	Vanderburgh	43.3	Clark
Fert Bonwell	Vermillion	48.2	Clark
Bernard V. Wagner	Warrick	46.5	Clark



FILM STAR Danny Kaye drank a glass of soybean milk on a recent trip to Bangkok. It was presented to him by Food and Agriculture Organization's Dr. S. S. De, regional nutrition officer for Asia and the Far East. Danny, who was on tour as ambassador at large for UNICEF, was told how soybean milk is helping to improve the diets of many people who do not otherwise get enough protein.

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THE PRESS

Saving Lives with Soy

PROTEIN malnutrition is a serious illness of children which causes digestive upsets and sometimes death—in some African hospitals the death rate has been as high as 50 percent. The disease comes of eating foods poor in protein. The best treatment is plenty of milk.

U. N.'s Children's Fund has financed milk processing plants in several undeveloped parts of the world. In many parts of the world, however, either enough milk cannot be produced to feed the children, or its cost is too expensive for most families. So substitutes are being explored and developed by U.N.'s Food and Agricultural Organization and World Health Organization.

Most people in the United States have never even heard of protein malnutrition. Other countries know it painfully under many names—India as "nutrition dystrophy," Latin America as "distrofia infantil,"

Every parent who takes a bottle of milk from a well-stocked refrigerator to feed to a child can do so in better conscience because U.N., and its agencies, are coming to the rescue of babies everywhere who are literally starving for milk.—*St. Louis Post-Dispatch.*

Offers New Markets

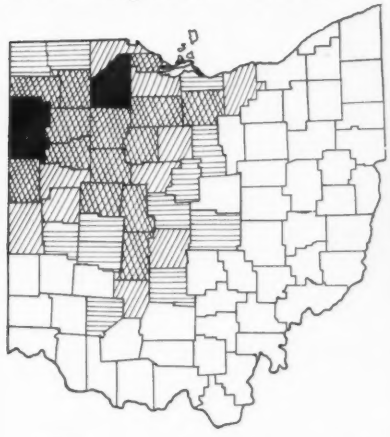
REPRESENTATIVES of the American Oil Chemists' Society meeting in Minneapolis, Minn., recently heard of a simple and economical "in-situ" epoxidation process that promises vast, new markets for agricultural fats and oils. Dr. Frank Greenspan and Ralph J. Gall of the Buffalo Electro-Chemical Co., Inc., division of Food Machinery and Chemical Corp., described how cheap and abundant farm crop derivatives such as soybean oil and oleic acid esters with hydrogen peroxide yield superior vinyl plasticizers.

This new class of plasticizers, epoxy fatty acid esters, protects vinyl resins from yellowing and degradation under the action of heat and light.

Polyvinyl chloride resins, which account for upwards of 500 million pounds of material per year, require plasticizers to convert the brittle resin into a reliable and processable product which reaches the consumer in the form of garden hose, floor covering, upholstery fabrics, drapery fabrics, raincoat material, and film for food packaging. These products benefit greatly from the permanence and excellent low temperature flexibility which can be custom-built into epoxy fatty acid ester plasticizers.

Although not a producer of these plasticizers, the Buffalo Electro-Chemical Co. has done a considerable amount of pioneering work on the development of epoxy fatty acid ester plasticizers.

Ohio Soybean Areas



OHIO'S soybean producing areas, 1952 crop year. White areas, less than 100,000 bushels per county. Horizontal lines, 100,000 to 300,000 bushels. Slanted lines, 300,000 to 500,000 bushels. Cross lines, 500,000 to 1 million bushels. Black, over 1 million bushels.

CROP REPORT

Final Crop Estimate 343 Million Bu.

SOYBEAN production in 1954 is estimated at 343 million bushels, according to U. S. Department of Agriculture's annual report issued Dec. 17. This is the highest of record, and 5 million bushels above the Nov. 1 report.

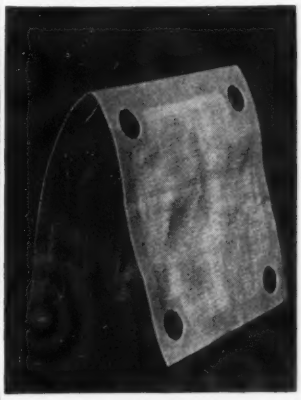
The record production this year comes largely as a result of increased acreage, since the indicated yield of 20.1 bushels per acre is only slightly above the average yield of 19.9 bushels per acre. However, the current yield is well above the relatively low yield of 18.3 bushels per acre harvested last year.

A record total of 19.3 million acres was planted to soybeans in 1954, 15 percent above 1953, the previous high. Of the total acreage, about 17 million acres or 88 percent was harvested for beans. This compares with 14.7 million acres and 87 percent for beans in 1953. The percentage cut for hay was below last year while the acreage for "other pur-

REPORTS ON QUALITY TO SOYBEAN DIGEST

	Oil Content %	Test Weight Lbs.	Moisture Content %	Foreign Material %
Central and Southeast Ark.	19	55	high	fair
Central Ark.	18-20		12-16	too much
Blytheville, Ark.		54-55½	11-13	
Escambia County, Fla.			high	high
Ala.			11-12	
West Central Ill.		56	14	3-10
Springfield, Ill.	20.5	56	11-12	3
East Central Ill.			11-13	within limits
Kansas, Ill.		55	12	2½
Assumption, Ill.		55	10-12	high
Quincy, Ill.	18.3-18	54-55	13	2
Shelby County, Ill.			dry	0-3
Champaign County, Ill.	average	52-56	very low	above average
Ind.		54-56	10-17	above normal
Northwestern Ind.		up 1½-2	12-13	1-2
Bremer, Butler Counties, Iowa			13.5	1½
Mason City, Iowa	17.3	55½	14	1
East Carroll Parish, La.		54	high	very little
Southwest Central Minn.			12	2 plus
South Central Minn.		okay	12-19	3-10
Lamont, Miss.			11-15	1 up
Beaufort County, N. C.		56	14	2
Van Wert, Ohio			14-15	
Union County, Ohio		high	13	
West Central Ohio			12-17	
Miami, Okla.		54	14-18	5-8
Lake County, Tenn.		53	15	4
Tidewater, Va.	20	57	13	3
Essex County, Ontario	average	56-58	14-17	2 or less
Middlesex County, Ontario			19	
Southwestern Ontario			15-22	

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poses," which includes abandonment, was higher in 1953.

The 1954 crop season was one of sharp contrasts for soybeans. The final outturn showed several states producing record yields, while others reported near failure. July drought brought reports of poor condition over much of the soybean area. However, August rains provided needed moisture over the northern parts of the main Soybelt. In this area, extending across Ohio, most of Indiana, the northern half of Illinois, Iowa and Minnesota, record and near record yields were harvested.

Drought, however, continued over much of the southern producing area and yields in most of the southern states were poor.

The crop was nearly harvested by Dec. 1, after considerable delay during October and part of November due to wet weather. Moisture content of the beans harvested has run well above that of the past two years.

The North Central states produced 90 percent of the nation's soybeans, a slightly higher percentage than last year. Record yields for each state were harvested in Ohio, Indiana, Minnesota and Iowa. The Illinois crop was seriously damaged by drought in the southern half of the state, and while the yield of 21.5 bushels per acre is one bushel above last year, it is over a bushel below the average. Missouri and Kansas were hard hit by the drought, and reported yields were low in both states.

In the South Atlantic states soybeans were damaged by drought, but fair yields were received in all producing states except South Carolina, Georgia and Florida.

The South Central states were again hard hit by dry weather after a very poor year in 1953. The area yield of soybeans is only 11.4 bushels per acre, slightly below the very poor yield of 12.4 bushels per acre harvested in 1953.

SOYBEANS FOR BEANS

State	Acreage harvested (1)			Yield per acre			Production		
	Average 1943-52	1953	1954	Average 1943-52	1953	1954	Average 1943-52	1953	1954
	—Thousand acres—			—Bushels—			—Thousand bushels—		
N. Y.	8	5	8	16.2	16.0	11.0	122	80	88
N. J.	16	27	24	17.7	18.0	22.0	281	486	528
Pa.	27	19	17	16.2	17.0	18.0	427	323	306
Ohio	1,032	1,036	1,165	20.1	20.5	25.5	20,674	21,238	29,708
Ind.	1,516	1,808	1,922	20.7	21.0	24.0	31,488	37,968	46,128
Ill.	3,570	3,846	4,289	22.7	20.5	21.5	80,946	78,843	92,214
Mich.	95	110	158	18.3	19.0	22.0	1,736	2,090	3,476
Wis.	38	56	69	13.8	14.5	15.0	526	812	1,035
Minn.	760	1,351	2,014	16.3	20.5	21.0	12,754	27,696	42,294
Iowa	1,707	1,657	2,150	21.0	21.5	26.0	35,527	35,626	55,900
Mo.	933	1,932	1,836	18.1	14.0	15.0	17,372	27,048	27,540
N. Dak.	15	23	71	11.4	13.5	15.5	179	310	1,100
S. Dak.	39	87	173	14.2	19.0	18.0	541	1,653	3,114
Nebr.	40	105	190	20.0	18.5	22.0	820	1,942	4,180
Kans.	296	496	306	12.6	8.0	8.0	3,802	3,938	2,448
Del.	51	64	68	13.2	16.5	17.5	689	1,056	1,190
Md.	52	95	108	14.8	19.0	18.5	800	1,805	1,998
Va.	115	167	187	16.2	16.0	15.5	1,914	2,672	2,898
N. C.	254	263	295	13.8	15.5	16.0	3,559	4,076	4,720
S. C.	41	130	130	10.0	11.0	7.0	456	1,430	910
Ga.	17	45	30	9.1	12.0	7.0	160	540	210
Fla.	.....	14	29	.....	18.0	12.0	.....	252	348
Ky.	102	96	128	16.8	13.0	16.0	1,740	1,248	2,048
Tenn.	120	150	180	17.5	13.5	12.0	2,200	2,025	2,160
Ala.	52	92	104	16.5	20.5	11.5	921	1,886	1,196
Miss.	209	250	519	15.2	12.0	9.5	3,333	3,000	4,930
Ark.	391	685	791	17.0	11.0	11.5	6,859	7,315	9,096
La.	30	40	53	14.2	16.0	16.0	434	640	848
Okla.	25	50	18	9.8	10.0	5.5	285	500	99
Texas	.....	.....	5	.....	.....	17.0	.....	.....	85
U. S.	11,559	14,679	17,037	19.9	18.3	20.1	230,649	268,528	342,795

(1) Equivalent solid acreage. (Acreage grown alone, with an allowance for acreage grown with other crops.)

SOYBEANS FOR HAY

State	Acreage harvested			Yield per acre			Production			Soybeans Grazed or Plowed Under		
	Average 1943-52	1953	1954	Average 1943-52	1953	1954	Average 1943-52	1953	1954	Average 1943-52	1953	1954
	—Thousand acres—			—Tons—			—Thousand tons—			—Thousand acres—		
N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	2
N. J.	12	5	7	1.56	1.50	1.60	19	8	11	9	9	11
Pa.	30	13	13	1.64	1.60	1.65	49	21	21	9	5	7
Ohio	59	18	13	1.46	1.45	1.55	85	26	20	17	10	14
Ind.	152	62	60	1.42	1.25	1.30	211	78	78	25	19	20
Ill.	202	104	97	1.28	1.10	1.10	255	114	107	31	33	35
Mich.	8	2	4	1.32	1.40	1.40	10	3	6	10	6	3
Wis.	33	10	12	1.67	1.65	1.60	54	16	19	6	4	6
Minn.	35	7	8	1.46	1.30	1.50	51	9	12	24	42	22
Iowa	41	12	13	1.49	1.50	1.40	61	18	18	21	10	20
Mo.	68	99	45	1.26	1.00	1.05	85	99	47	51	60	106
N. Dak.	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
S. Dak.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3	7
Nebr.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3	4
Kans.	12	48	13	1.26	.90	.70	14	43	9	24	54	106
Del.	12	6	8	1.24	1.25	1.20	14	8	10	4	2	2
Md.	28	18	21	1.36	1.45	1.45	35	26	30	7	2	3
Va.	47	52	53	1.28	1.10	1.00	58	57	53	58	41	38
W. Va.	18	8	8	1.57	1.50	1.80	27	12	14	2	1	1
N. C.	153	136	131	1.10	1.00	1.05	169	136	138	118	67	87
S. C.	23	28	27	.96	.95	.65	22	27	18	49	42	79
Ga.	37	41	45	.94	1.00	.75	34	41	34	44	51	80
Fla.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	6
Ky.	89	91	71	1.40	1.30	1.35	123	118	96	20	20	15
Tenn.	115	95	112	1.22	1.20	.90	138	114	101	107	63	55
Ala.	128	53	54	.91	.90	.75	113	48	40	26	7	11
Miss.	153	120	133	1.22	1.05	1.00	184	126	133	94	149	89
Ark.	96	108	121	1.08	.85	.80	101	92	97	83	58	53
La.	26	11	9	1.23	1.15	1.15	32	13	10	229	170	212
Okla.	12	15	6	1.04	.95	.60	12	14	4	10	10	32
Texas	3	1	1	.73	.90	.70	2	1	1	6	4	4
U. S.	1,594	1,163	1,085	1.24	1.09	1.04	1,964	1,268	1,127	1,092	950	1,131

Annual summary, USDA crop reporting board.

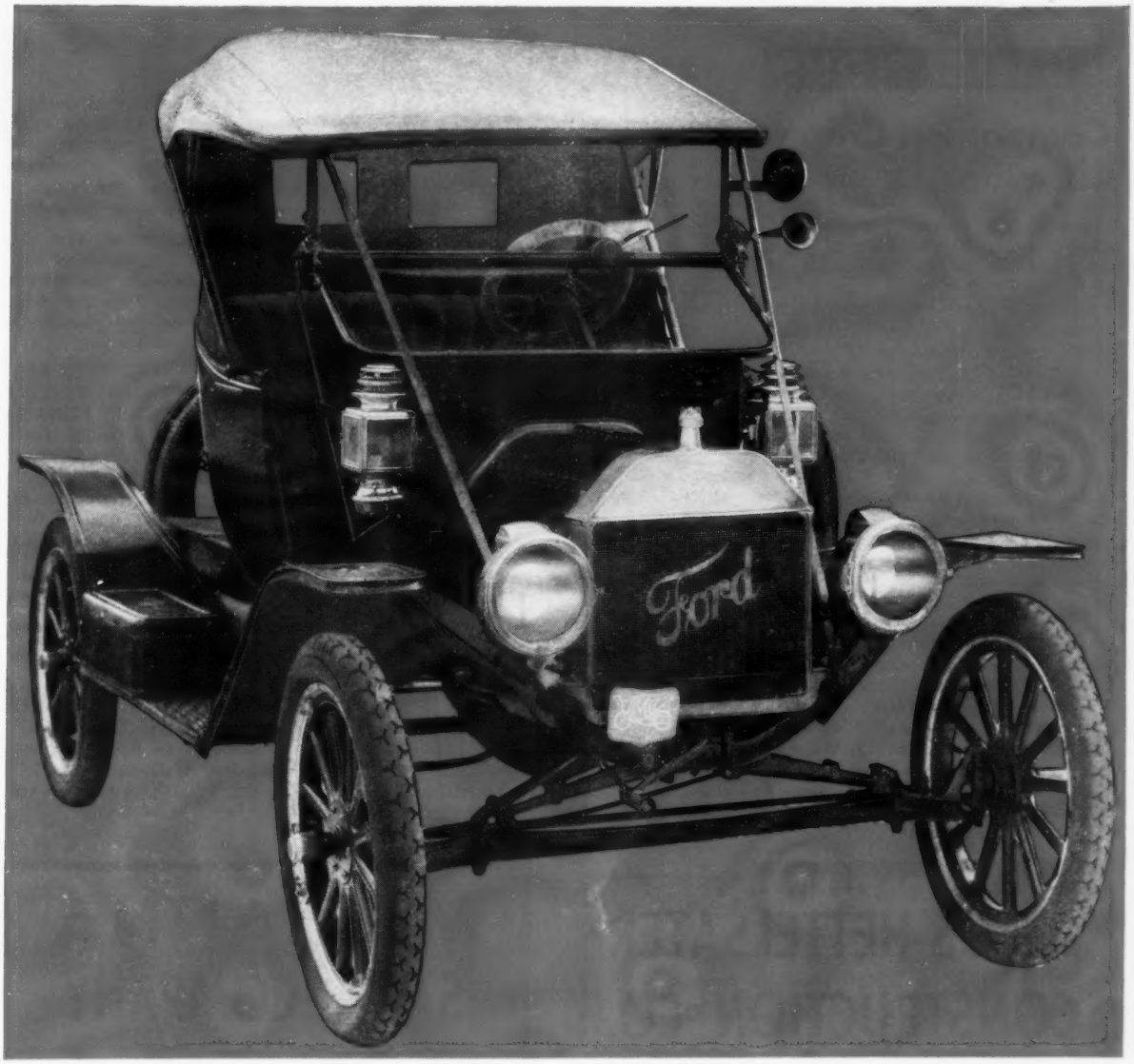
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PUBLICATIONS

Companion Crop with Beans Successful

WEED CONTROL. A new practice in soybean production—the use of companion crop competition for weed control—has been tried with some success at the University of Minnesota.

Soybeans sown with a grain drill in non-cultivated rows six inches apart and with winter wheat or winter rye as companion crops yielded as much or more than soybeans without companion crops whether in non-cultivated rows six inches apart or in cultivated rows 40 inches apart.

Weed control with companion crops was much superior to no companion crop in non-cultivated soybeans, and was about equal to that achieved by cultivation.

The expense of this weed control practice is relatively small, only one bushel per acre of farm-grown wheat or rye. The new practice is also good soil conservation practice.

Winter vetch, alfalfa, medium red clover, bromegrass or timothy companion crops did not give satisfactory weed control. Field peas as a companion crop resulted in soybean lodging.

In cultivated soybeans grown in rows 40 inches apart, companion crops sown in the soybean row did not add much, if any, weed control to that achieved by cultivation. However, this practice may be of interest to seed producers of small-seeded legumes and grasses and to farmers who wish to cultivate soybeans or corn in erosive areas.

Establishment of the companion crop in the spring in advance of soybean planting was not as successful as sowing soybeans and companion crop at the same time.

COMPANION CROPS FOR WEED CONTROL IN SOYBEANS. By R. G. Robinson and R. S. Dunham. Agronomy Journal, Vol. 46, No. 6, June 1954, pages 278-281.

FERTILIZERS. An investigation concerned with the effect of phosphate fertilization on the nutritive value of soybean forage was carried on over a period of five years at the North Carolina Experiment Station.

At extremely low levels of soil phosphorus, phosphate fertilization brought about numerous changes in the chemical composition of the soybean plant, with noticeable increases in the phosphorus, calcium, and protein concentration. Phosphate fertilization increased the yield of soybean hay by two- or three-fold.

Phosphate fertilization also increased the nutritive value of soybean hay as indicated by the growth of lambs and the growth and bone formation in rabbits fed phosphate-treated soybean hay.

EFFECTS OF PHOSPHATE FERTILIZATION ON THE NUTRITIVE VALUE OF SOYBEAN FORAGE FOR SHEEP AND RABBITS. Technical Bulletin No. 1086. By Gennard Matrone, Frank H. Smith, Virginia B. Weldon, W. W. Woodhouse, Jr., W. J. Peterson, and Kenneth C. Beeson. North Carolina Agricultural Experiment Station, State College Station, Raleigh, N. C.

MISCELLANEOUS

DRYING SHELLED CORN AND SMALL GRAIN WITH UNHEATED AIR. Leaflet No. 332. U. S. Department of Agriculture. Price 10 cents. Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

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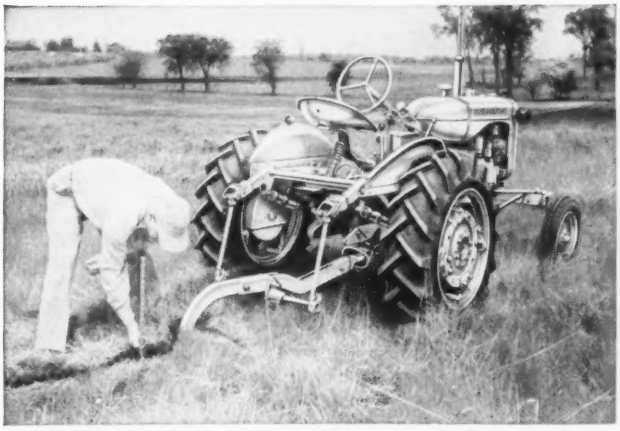
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dynamic new DEPTH power

unlocks bigger yields



The CA Tractor has power to pull its mounted subsoiler to depths of as much as 18 inches in most dry soils — and hold it there. TRACTION BOOSTER also assures steady working depth for mounted plows, listers, bedders, field cultivators and disc harrows.

Thousands of farmers are expanding the productive capacity of their farms by utilizing the third dimension of their fields . . . DEPTH!

These are the owners of Allis-Chalmers CA and WD-45 Tractors with dynamic *extra* DEPTH POWER . . . Traction Booster power that enables them to till their soils as deeply as good farming practice may require.

Plowing one inch deeper than usual means power to move up to 1,500 more *tons* of earth per day. Subsoiling . . . breaking up and shattering dry hard-pan to depths of 18 inches or more . . . requires the kind of *extra* power and ground-gripping traction for which CA and WD-45 Tractors are famous.

That higher horsepower is there for one reason. To USE! With it, you can farm faster, *deeper* . . . unlock the full potential of your soil . . . for bigger yields, more profit, better farm living!

★ ★ ★

Carry a measuring stick on your tractor. Use it to measure implement settings accurately. Check the depth — hold it constant with Allis-Chalmers mounted implements. It pays! Your dealer can show you how.



A world of new tractor advancements awaits you at your Allis-Chalmers dealer. See these new, more powerful tractors with SNAP-COUPLER, Power-Shift wheels, Two-Clutch power control *without shifting* . . . plus Depth Power at a glance with the new Traction Booster indicater (at left). Weight transfer to drive wheels is *automatic* — on and off, as needed, for maximum traction. It's *live*weight, not deadweight.

SNAP-COUPLER is an Allis-Chalmers trademark.

ALLIS-CHALMERS
TRACTOR DIVISION • MILWAUKEE 1, U. S. A.

FEEDING

UREA. *In vitro* experiments by the du Pont Co. comparing urea with soybean, linseed, cottonseed and corn gluten meals indicated the superiority of urea as a nitrogen source in promoting cellulose digestion by rumen microorganisms.

Utilization of urea in 1:1 mixtures with various feed proteins, and its presence in such mixtures improved cellulose digestion above that observed with the feed proteins alone.

An increase in the level of urea used as a sole source of nitrogen resulted in an increase in cellulose digestion as well as in the amount of urea utilized.

COMPARISON OF UREA AND PROTEIN MEALS AS NITROGEN SOURCES FOR RUMEN MICROORGANISMS: UREA UTILIZATION AND CELLULOSE DIGESTION. By I. J. Belasco, E. I. du Pont de Nemours & Co. Journal of Animal Science, Vol. 13, No. 4, November 1954, pages 739-747.

COMPARISON OF UREA AND PROTEIN MEALS AS NITROGEN SOURCES FOR RUMEN MICROORGANISMS: THE PRODUCTION OF VOLATILE FATTY ACIDS. By I. J. Belasco, E. I. du Pont de Nemours & Co. Journal of Animal Science, Vol. 13, No. 4, November 1954, pages 748-757.

PROTEINS. Texas tests have been undertaken to test the effects of the various combinations of animal and vegetable protein and the presence or absence of chloromycetin on reproductive performance in gilts.

The only significant difference demonstrated was a stimulating effect toward an earlier age of puberty in favor of animal protein. Although not statistically significant, an increase in ovulation rate in favor of animal protein was indicated.

SOME EFFECTS OF SOURCE OF PROTEIN AND AN ANTIBIOTIC ON REPRODUCTIVE PERFORMANCE IN GILTS. By Stewart H. Fowler and George L. Robertson, Texas Agricultural Experiment Station. Journal of Animal Science, Vol. 13, No. 4, November 1954, pages 949-954.

CHOLINE. A number of Minnesota experiments have been conducted with Broad Breasted Bronze turkey poults fed on all-vegetable-protein ration including corn and soybean oil meal.

The improvement in feeding efficiency as a result of adding B-12 to the ration was slight and not completely consistent.

The addition of either choline or methionine not only improved growth but feed efficiency as well. In some of the experiments the addition of choline was necessary to prevent excessive mortality.

Choline has also been shown to play a role in the prevention of gizzard erosion in turkeys.

VITAMIN B-12 AND CHOLINE IN CORN-SOY RATIONS FOR STARTING POULTS. By D. H. Sherwood and H. J. Sloan, University of Minnesota. Poultry Science, September 1954, Vol. 33, No. 5, pages 1015-1020.



BOOKS

Book on Soybeans

WITH ALL the wealth of material published on soybeans, to date there have been few books, and almost none written strictly for the producer.

Floyd Barnhart, a vocational agriculture instructor at Caruthersville, Mo., has now partially remedied the situation with a well-written 290-page book, Soybeans, which he has published himself.

Barnhart, who holds a masters degree in education in agriculture, has written and published a similar book on cotton.

As a teacher, Barnhart has written the book with the student of agriculture in mind, but it is equally well adapted to the producer.

Says Barnhart in his preface, "This book is written with the idea of presenting information on the subject of soybean production in simple clear language, so that it may be used with equal efficiency by high school students, others in vocational agricultural education, and by farmers, as well as by undergraduate students in colleges of agriculture."

The author covers the whole field of soybean production quite thoroughly, with some additional background on usage, world production, etc. There are extensive chapters on varieties, soil preparation, fertilizers, planting, inoculation, cultivation, harvesting and storing, pests and diseases.

Each chapter has been checked by one or more well-known authorities.

The book is well worth a place on the shelf of anybody interested in any aspect of soybean production.

SOYBEANS. 290-pages, well illustrated. $3.75. Order from the author, Floyd Barnhart, Caruthersville, Mo.

SOYBEANS . . . A BILLION-DOLLAR INDUSTRY



Every SOYBEAN GOES TO MARKET!

Unloading soybeans at Farmers Soybean Corp., Blytheville, Ark.

The great bulk of the nation's annual 300-million-bushel soybean crop is traded. Few bushels remain on the farm except the 20 to 25 million used annually for seed. Soybeans are among the most actively traded farm commodities on the board of trade. They rank only below wheat and corn in dollar value and bushels handled by the grain trade.

Virtually the whole crop has to be shipped, stored and processed. This immense job requires a tremendous capital outlay in equipment for transportation, storage, conveying, cleaning and many other operations.

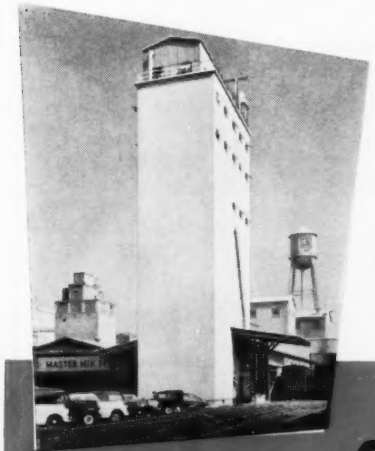
Most grain dealers in the big bean states* are handlers of soybeans. A large part of the crop moves into the big terminal elevators. In addition, port elevators handling export shipments are growing rapidly in size and importance.

Many grain dealers also manufacture or handle livestock feeds, of which soybean oil meal is a major ingredient. Of the 5.5 million tons of soybean oil meal produced in 1952-53, all but 77,000 tons went into livestock feed; and a substantial part of this tonnage was handled by elevators. Many are also dealers in seed beans.

Over one-sixth of Soybean Digest readers are classified as grain dealers or handlers. One-fourth of our readers are grain handlers and/or feed dealers or manufacturers. Also many more of our readers are engaged as grain dealers or feed men in addition to other occupations. Grain and feed men are outnumbered only by producers as Digest readers.

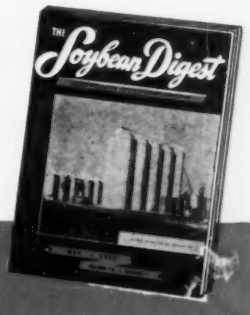
Soybeans are a big crop. The annual value of the 300-million-bushel crop as it enters the market place is close to a billion dollars. Value of the finished products is many billion dollars. Value of the equipment needed to produce, handle and process the crop runs into billions.

***Illinois, Indiana, Ohio, Iowa, Minnesota, Missouri, Arkansas, Mississippi, Louisiana, North Carolina, Tennessee, Wisconsin and a number of other states.**



Bulk feed building of Central Soya Co., Inc., Decatur, Ind.

Soybean Digest circulation is concentrated in the leading soybean production areas but the Digest is read in 43 states, Washington, D. C., and many foreign countries. You will find it closely scanned by producers, processors, grain handlers and others interested in soybeans.



Address Inquiries to

The SOYBEAN DIGEST Hudson, Iowa

GRITS and FLAKES . . . *from the World of Soy*

Soybean Specialist

Astor Perry, peanut specialist for the North Carolina Extension Service since 1953, has been appointed soybean specialist for North Carolina. It is anticipated that one-half of his time will be devoted to each crop.



Astor Perry

A native of Tennessee, Perry did his undergraduate and graduate work at North Carolina State College. He was awarded the Master of Science Degree in agronomy this past year.

In reviewing the soybean situation in North Carolina, Perry stated: "The prospects are good for increasing the average yield of soybeans especially in the Tidewater section where many farmers who are following recommended practices have obtained yields as high as 45 bushels per acre. Our low yields are due primarily to a deficiency of calcium and potash. A good educational program should help correct this situation."

Gleaner Corp. Sold

Sale of Gleaner Harvester Corp., Independence, Mo., to **Allis-Chalmers Manufacturing Co.** was authorized by directors of Gleaner, subject to approval by stockholders.

Allis-Chalmers does not plan to change the marketing, distribution and production setup now in force. Allis-Chalmers' nationwide dealership organization, sales force and executive staff will help put Gleaner Harvester machines into new regions.

Plans call for Gleaner to become a division of Allis-Chalmers. The Gleaner plant will produce a self-propelled combine and will maintain its present dealership franchises. Allis-Chalmers will also continue its separate dealer connections.

Glidden Executive

Wilbur E. Bindenagel has been named vice president of the **Glidden Co.** in charge of the company's extensive trading operations.

Mr. Bindenagel joined Glidden in 1953 as manager of trading for the soya products division and became assistant general manager of the chemurgy division. He will continue in this capacity in addition to supervising all Glidden trading activities.



Wilbur E. Bindenagel

He will continue to make his headquarters at the chemurgy division offices in Chicago. He was formerly associated with Cargill, Inc.

Board of Trade Elects

Mr. Julius J. Mayer, executive vice president of Continental Grain Co., has been nominated as president of the **Chicago Board of Trade** to succeed Sylvester J. Meyers, retiring president. Mr. Mayer served as first vice president of the exchange the past year and was second vice president in 1953. He previously served a three-year term as director.

Paul Joslyn, secretary and treasurer of J. J. Badenoch Co., is nominated as first vice president and John E. Brennan of John E. Brennan Co. is nominated for the second vice presidency.

Renominated for three-year terms as directors are Ford M. Ferguson, Edward J. Kazmarek, and Clarence Rowland, Jr. Also nominated as directors for three-year terms are William J. Kentnich, Jr., and Paul E. Berry. Vincent M. Fagan is nominated to serve a one-year term as director.

Butler Changes



John A. Morgan



Walter L. Smith

Directors of **Butler Manufacturing Co.**, Kansas City, Mo., have named John A. Morgan to the newly-created post of executive vice president.

Walter L. Smith was elected vice president, engineering and production.

Morgan's career with Butler has extended over 15 years. He was elected to the board of directors in 1952. He will direct the overall activities of the company.

Smith joined Butler in 1934 and was elected to the board of directors in 1947. He is one of the authors of the Tool Engineers Hand Book.

Award to Dannen

Dannen Mills, Inc., St. Joseph, Mo., has received the employee communications award of the Associated Industries of Missouri, for the second consecutive year.

WILBUR-ELLIS COMPANY

Brokers of Soybean Oil and Proteins

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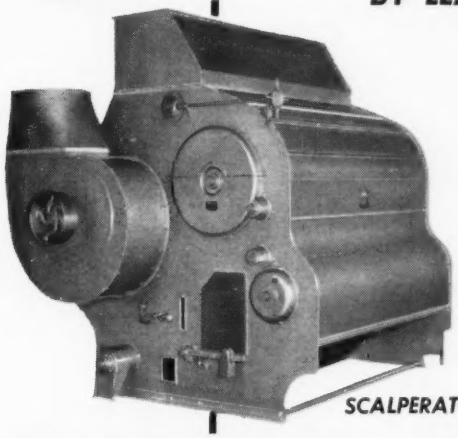
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APPROVED



BY LEADING HANDLERS AND PROCESSORS

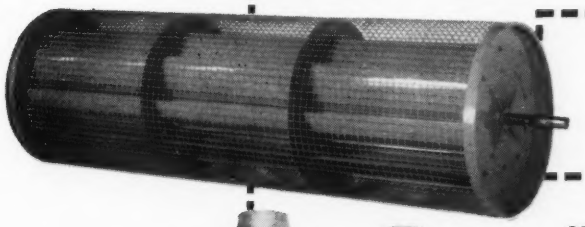
OF SOY BEANS



SCALPERATOR

FIRST SCALPING AND ASPIRATION

The Carter Scalperator does a good job of rough scalping *and* aspirating beans going directly to storage. It removes both coarse and light foreign materials. It also is a valuable machine to use on beans or grains when turned for cooling. Note that the Scalperator can be used on other grains without change of equipment. In capacity this is a "fast" machine. The Scalperator uses only rotary motion, thus does not vibrate.



The Basic Unit—Hart-Carter "Squirrel-Cage "Scalping Reel. Baffle plate construction retards flow of beans through the reel, insuring *thorough* rough scalping. The reel is self cleaning.

SECOND SCREENING AND ASPIRATION

The Carter Millerator, used before processing the beans, does a refined job of screening and aspirating. Its upper screen removes all material that is *larger in diameter* than the beans, and much of the material that is *longer*.

Its lower screen removes small seeds and sand. Controlled aspiration effectively removes light foreign materials. The Scalperator and Millerator are all-metal, require low power. Write for complete information . . . today.



MILLERATOR

HART-CARTER CO.

689 19th Ave. N. E. Minneapolis 18, Minn.

EFFICIENT SCALPING AND ASPIRATION

To Mitchell Farms

Frank V. Stevenson has recently been appointed sales manager for **Mitchell Farms,** Windfall, Ind., June S. Mitchell announces. He replaces Thomas L. Pitts, who is on leave for two years' service with the U. S. Armed Forces.



Frank V. Stevenson

Mr. Stevenson was associate professor of plant pathology at the Everglades Experiment Station, University of Florida, from 1950 to 1953, and recently state sales manager for Crow Hybrid Corn Co., Milford, Ill.

Cargill, Inc., has announced the appointment of W. B. Saunders as Cargill's regional manager at Chicago, effective Dec. 1. In this capacity he will supervise Cargill's grain activities in the central region, and will also be in charge of the firm's soybean processing operations in the East. He joined Cargill in 1946 and has been in charge of the firm's Eastern soybean processing operations of the oil division since 1952.

John H. Caldwell, partner of **J. H. Caldwell Co.,** grain and feed merchandising firm, St. Louis, died recently of a heart ailment. He had been a member of the St. Louis Merchants Exchange since 1918 and was a former president. He was an executive of Hoosier Soybean Mills, Marion, Ind., and a former vice president of Ralston Purina Co.

A gift of $10,000 has been made by **Woodson-Tenent Laboratories,** Memphis, Tenn., to Memphis University School, an independent school for boys. The school will be built this year and will be opened in September with an enrollment of about 240 boys of high school age. One of the science classrooms will be called the Woodson-Tenent room in appreciation of the gift.

Dr. Wise Burroughs, associate professor of animal husbandry at Iowa State College, has been selected to receive the annual $1,000 award of the American Feed Manufacturers Association. He was cited for outstanding research in animal nutrition and especially for his studies into the physiology of rumen microorganisms.

The Young Farmer is a new three-times-a-year magazine published by **General Mills, Inc.,** and distributed through vocational agricultural teachers.

INOCULATE SOY BEANS

with

Urbana Culture

Superior Legume Inoculator

IT PAYS!

The Urbana Laboratories

Urbana, Illinois

Staley Appointment

The assignment of Eugene E. Rhodes, assistant treasurer, as acting manager of the soybean division has been announced by the **A. E. Staley Manufacturing Co.,** Decatur, Ill.



Eugene E. Rhodes

Rhodes, a Staley employee since 1928, will fill a position that has been vacant since Paul Ray resigned to become vice president of the Burrus Feed Mills, Inc., Dallas, Tex.

The **Simonsen** industries of Quimby, Iowa, are expanding their operations. A new $175,000 addition, 144 feet in length, and an L about 80 by 65 feet, are being built.

Jonathan W. Jefferson, manager of the **Dannen Mills** elevator at Hamilton, Mo., is being transferred to the grain department of the milling firm in St. Joseph.

J. Alden Extrom has been named general manager of the **Chase Bag Co.'s** paper mill at Chagrin Falls, Ohio. He was recently technical superintendent of the Alton Box Board Co. of Alton, Ill.

Fred Summers, Warrensburg, Mo., has been appointed sales manager for **Dannen Mills,** St. Joseph, Mo. He has been manager of Dannen's central Missouri territory.

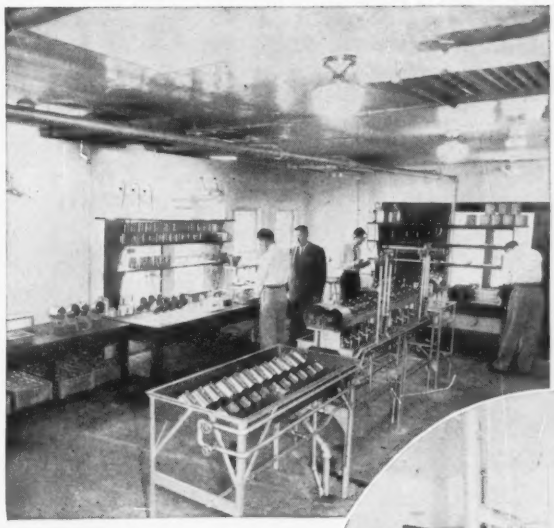
Robert Hattersley has been appointed territory sales manager for **McMillen Feed Mills** in south central Michigan and A. C. Miller has been named territory manager in east central Indiana. Both men were assistant managers prior to their promotion.

Dr. Spencer H. Morrison, nationally-known feed authority, has joined **Pillsbury Mills, Inc.,** as director of technical sales for the feed and soy division at Clinton, Iowa. For the past 15 years he has been a partner in the Morrison Publishing Co., Ithaca, N. Y., publishers of F. B. Morrison's Feeds and Feeding.

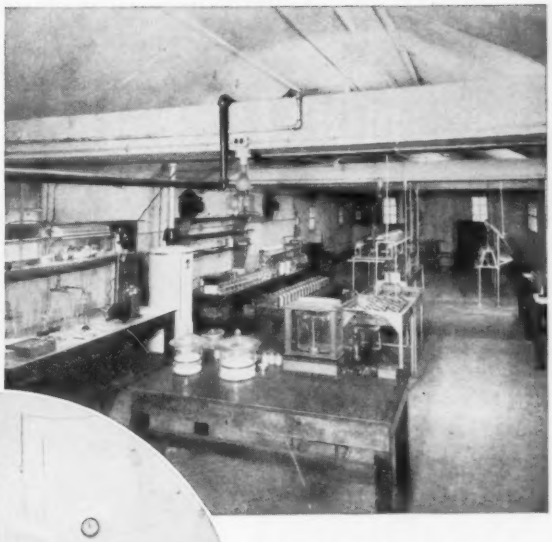
Pillsbury Mills, Inc., Minneapolis, has established a new feed branch warehouse in San Jose, Calif., it was announced by Clyde Hendrix, vice president. Ja Joie Mon Santo will manage the facilities.

The **Glidden Co.** will begin immediate construction of a 6,500,000-bushel terminal grain elevator on the Calumet River in Chicago, Dwight P. Joyce, president, has announced. To cost more than $5 million, the new elevator will be in operation within a year.

Serving The Soybean Industry



The Chicago, Ill., laboratory is equipped with the most modern equipment for refining soybean oils.



The Des Moines, Iowa, laboratory with all the latest equipment for refining oils.



The Oil Refining Department at the Memphis, Tenn., laboratory, with a capacity of 150 refinings daily.

7

Chemical Laboratories to serve you.

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- **Memphis, Tenn.**
- **Little Rock, Ark.**
- **Blytheville, Ark.**
- **Cairo, Ill.**
- **Clarksdale, Miss.**

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SPECIALIZING IN SOYBEAN OILS — CAKE —MEALS — FEEDS

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Same High Standards of Workmanship
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- MEASURES ENTIRE SAMPLE
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New Method of Distribution Means SAVINGS to You

Because of our new policy of selling direct to the consumer—and not through agents—customers now can order the late model 400-G Steinlite Moisture Tester direct from the Seedburo Equipment Company at a reduced price.

This new method of distribution will improve service and delivery and at the same time materially reduce the cost of distribution—making it possible for you to purchase a 400-G at a considerable savings. We invite your inquiry.

-SAVE MONEY—BUY DIRECT

Seedburo Equipment Company, Dept. SD1
618 W. Jackson Blvd.
Chicago 6, Ill.

Please send me literature on the 400-G Steinlite Moisture Tester now listed at the new low price of $345.00

Name _____

Address _____

City _____ State _____

"World's Leading Supplier of Grain Testing Equipment for Over 40 Years"

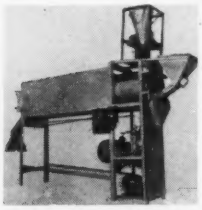
SEEDBURO

(SEED TRADE REPORTING BUREAU)

EQUIPMENT COMPANY

NEW PRODUCTS and SERVICES

SEED TREATER. O. W. Kromer Co. has introduced a seed treater that operates on an entirely different principle from the slurry type treaters, the firm says. It coats the seed uniformly with chemical protectant so there are no untreated spots for fungus or insects to attack, and the coating is uniform in thickness. There are no lumps to interfere with uniform planting.

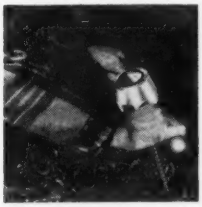


The treater feeds a continuous stream of seed into a revolving mixing chamber where the seed is first subjected to a controlled moist atmosphere. As the seed continues through the mixing chamber it passes through a cloud of chemical dust were it acquires a thin, uniform coat of protectant.

The seed treater will apply powdered or liquid protectant to any seed and it will handle up to 17,000 pounds of seed per hour.

For further information write Soybean Digest 1b, Hudson, Iowa.

SUBSOIL TESTER. A new instrument, the Aquaprobe, for determining relative subsoil moisture content, is announced by General Scientific Equipment Co. The instrument provides an instantaneous reading of relative moisture at any point down to 14 inches below ground level.



Use of the Aquaprobe as a check on subsoil moisture can save immense quantities of water in irrigation areas. It is quickly adjusted by the user for the soil condition of his area.

For further information write Soybean Digest 1a, Hudson, Iowa.

COMBINE. John Deere offers its new self-propelled combine, the 45, with eight-or ten-foot cut and 26-inch separator.

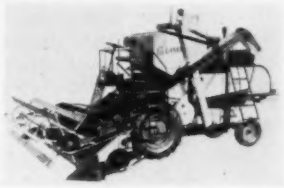
This new 45 combine is the little brother of the well-known 55. It offers a host of tried and proved features, plus many new refinements that insure easier operation and better harvests.



For further information write Soybean Digest 1d, Hudson, Iowa.

COMBINE. One of the most advanced ideas in hydraulic operation has been applied to the development of the new 1955 model Gleaner-Baldwin self-propelled combine, according to the manufacturer.

It is said that through the use of a new principle of hydraulically controlled variable speed, the machine offers an ease of operation never before possible, plus an infinite number of speeds in the three forward and one reverse gear range.



The combine features a new hinged bin unloader that is strictly a one-man operation.

For further information write Soybean Digest 1, Hudson, Iowa.

BOX CAR UNLOADER. Stephenson - Adamson Co. announces its new box car unloader bulletin 1654, which describes a new type of box car unloader with automatic power scoop.

The unit, limited to materials which are free flowing, provides an economical solution for plants that have unloading requirements exceeding the output of the conventional hand-operated power shovel but do not require large rotary dump installations.

The unit unloads cars on either of two tracks in approximately one-half man hour per car.

For further information write Soybean Digest 1c, Hudson, Iowa.

FARM HOIST. The Ever-Tite Mfg. Co. is marketing a new hydraulic hoist for use on farms, in industrial plants, warehouses, etc. It lifts up to 8,000 pounds.

The hoist can be operated in either vertical or horizontal position. Raises to six feet from floor or ground.



Manufacturer says the hoist is equipped with a very fine pumping unit. It unscrews so that sand, dust and grit can easily be washed out. There is no need to send it back to the factory for cleaning.

The hoist is with compound cable and pulley, mounted on a strong stand. It weighs about 63 pounds. Without stand it weighs about 37 pounds and makes an excellent heavy-duty jack.

Fr further information write Soybean Digest 1fe, Hudson, Iowa.

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WASHINGTON DIGEST

1955-Crop Supports to be Lower?



By PORTER M. HEDGE
Washington Correspondent for The Soybean Digest

PARITY. Soybeans will get a new and probably higher parity price this month. Adjustments necessary to bring parity for most commodities up to date under the Agricultural Act of 1949 are made in the first month of every year.

Before 1950, soybean parity was influenced by only one changing factor. That was the fluctuation in farm costs, as measured by the index.

Soybeans prior to 1950 had a fixed base price of 96 cents a bushel. To get soybean parity you simply multiplied 96 cents by the parity index for the current month. By this old method soybean parity in November would have been $2.69 a bushel instead of $2.79.

Now, and ever since 1950, two changing factors have influenced parity for soybeans. One is the index of farm costs—the index of prices paid adjusted slightly to reflect wage rates. The other and more important one is that the base price is now permitted to change from year to year, instead of remaining fixed.

The base price is now calculated from the average farm price for soybeans during the last 10 years, adjusted by the average of the index of prices received for all farm commodities in the same 10-year period.

When the new base price is determined each year, it is multiplied by the index which measures farm costs—the index of prices paid by farmers, or parity index. This gives parity.

This is the new or modern method of calculating parity. It is being used now for most commodities. Exceptions are corn, wheat, cotton and peanuts of the basic crops, and certain other crops which are still using a step-down, or transitional, parity to cushion the effect of too rapid a decline from the old to the new.

To get base price for soybeans now you take the latest 10-year average price received by farmers for soybeans and divide this by the average of the index of prices received for all commodities in the same period.

Last year at this time the 10-year average price for soybeans was $2.57 a bushel. The index of prices received for all commodities for the same period averaged 256 percent of the 1910-14 base period. Dividing $2.57 by 256 gave a base price for soybeans in 1954 of $1 a bushel.

To get parity for soybeans all you had to do was to multiply $1 times the parity index. Last January this index was 283 percent of 1910-14. So parity for soybeans was $2.83 a bushel in January. Last November the parity index was 279, so parity for soybeans had dropped to $2.79 a bushel during the year.

The base price for soybeans this month is expected to rise at least a cent—to $1.01 a bushel. It could go higher. This is because, in taking the latest 10-year average price, the increase in soybeans has been a little greater than the increase in the general average of all farm prices.

A lower-priced year is dropped from the calculation. A higher-priced year is added. So long as you are dropping low years and adding high years, soybean parity will continue to hold its own or to increase. When you begin dropping high years and adding lower ones, parity will tend to decline. This has started in some commodities, but it is not likely to begin in soybeans for several years.

A 1-cent-a-bushel rise in the soybean base price this month would increase soybean parity by 3 cents, assuming no change in the parity index: $1.01 base price x 279 parity index equals $2.82 parity. Any change in the parity index would also change soybean parity, up or down.

The 1944-53 average farm price for soybeans from which the 1954 base price was calculated was $2.57 a bushel. This year, 1944 is dropped ($1.93 a bushel), and 1954 is added (over $3).

The effect of picking up the high year and dropping the low one will be to increase the average price of soybeans more than the average of all prices. This will raise the base price.

A new and higher soybean parity may have some effect on the level of price support decided on for the 1955 crop.

SUPPORT. USDA officials have had 1955 price support for oilseed crops under study for several weeks. No final decision is to be arrived at, however, until a conference with representatives of the commodity groups concerned is held in January.

It is known that USDA officials would prefer to drop price support for cottonseed this year if they could do so without stirring up trouble in Congress.

Members: Leading Exchanges

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It's been reported that a soybean price support of 70 percent of parity was being considered. While it is known this is not final, the feeling in Washington is that the plans call for some further lowering of soybean support.

Soybeans are now supported at 80 percent of parity, and the 1954-crop loan rate is $2.22 a bushel. If January parity is $2.82, an 80 percent loan rate would be $2.26 a bushel; a 75 percent rate would mean a $2.12 loan; and a 70 percent rate would mean a $1.97 loan.

LOANS. Soybean loans close out at the end of this month—Jan. 31. So if you're interested, check with your local Agricultural Stabilization Committee before it is too late.

A fair-sized volume of beans went under price support up to mid-November, the latest period for which data are available. The total was 8,573,177 bushels.

This was well below the total for the same date last year—20,135,-391 bushels—but fairly high considering the high level of prices in relation to the $2.22 support level.

SUPPLIES. The final 1954 estimate of USDA crop reporting board puts this year's record breaking soybean crop at approximately 343 million bushels an increase of 11½ million bushels above the estimate in October.

Rough USDA estimates of use indicate a crush of around 260 million bushels, export of 50 million bushels, use of 28 million bushels for feed and seed, and a carryover of close to 5 million bushels next fall.

A total supply of oilseed meals of around 9.3 million tons is indicated —300,000 tons or more above the estimate of last October. The supply last year of the principal oilseed meals was 8,635,000 tons.

Increases in both soybean and cotton crops reported last month put additional pressure on the prices of vegetable oils. Fats and oils experts in Washington have been anticipating a break in vegetable oil prices during the winter period—unless the surplus should be siphoned off by much larger tenderings of cottonseed oil to CCC.

Multiple Delivery

The board of directors of the Chicago Board of Trade has appointed a special committee to consider the advisability of multiple delivery points for soybean futures contracts. Committee members are William J. Walton, General Mills, Inc.; Earle Combs of E. M. Combs & Son; Ralph Golseth, Lauhoff Grain Co.; Wilbert Huge, Central Soya, Inc.; Willard Lighter, the Glidden Co.; Julius Mayer, Continental Grain Co.; and Adam Riffel of A. J. Riffel & Co.

In its initial meeting the committee discussed the addition of other Midwestern points for delivery purposes. They are interested in receiving facts and opinions relative to the advantages and disadvantages of multiple deliveries and anxious to hear from as many people as possible.

Comments should be submitted in writing to Robert C. Liebenow, Board of Trade secretary.

Protein Substitute

Workers at the Agricultural Experiment Station at Iowa State College are trying to find better types of nitrogen feeding compounds to supplement the short supplies of protein feeds.

Wise Burroughs, directing the tests, says several nitrogen feeding compounds have shown possibilities as potential feeding sources, similar to the present use of urea in ruminant feeds. Burroughs says that in preliminary feeding trials, ammonium formate, ammonium acetate and proprionamide gave results comparable to urea.

Memphis Offers New Meal Contract

A NEW soybean meal futures contract inaugurated Jan. 3 has been announced by A. A. Williams, executive vice president of the Memphis Board of Trade, Memphis, Tenn.

The contract will be 100 tons bulk solvent process 44-percent protein soybean oil meal of merchantable quality, with destinations in the Eastern Trunk Line territory and New England.

"This market is being created especially at the request of many present users of our soybean meal futures markets in order to provide a more precise hedging facility for their specific needs than is presently available in the unrestricted market here and in Chicago," said Williams. "It should particularly appeal to the trade in general and speculative interests in and adjacent to the Eastern Trunk Line territory."

The unrestricted soybean meal futures contract traded on the Memphis Board of Trade is the oldest such contract in existence. It was inaugurated in July 1940, and with the exception of the war years when all markets were stagnated, has enjoyed steady growth.

Market Street

We invite the readers of THE SOYBEAN DIGEST to use MARKET STREET for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

Rate 10c per word per issue. Minimum insertion $2.00.

FOR SALE — FLAKING AND cracking rolls, meal toasters, filter presses, hammer mills, Anderson 14-inch conditioners, 36-inch cookers. Pittock & Associates, Glen Riddle, Pa.

BUY SURPLUS FARM TOOLS, machinery, truck, tractor from U. S. government. Government surplus list $1.00. Box M213, East Hartford 8, Conn.

WE ARE SELLING THE ARNOLD Mill machinery. All Nordyke & Marmon 9"x30" and 9"x36" double roller mills, collar oilers, roller feeders. One 200 h. p. G.E. induction motor, 2200 volts 3 phase 60 cycle 300 RPM. One 200 h.p. Westinghouse induction motor, 440 volts 3 phase 60 cycle 900 RPM. One 75 h.p. Westinghouse induction motor, 2200 volts 3 phase 60 cycle 900 RPM. Starter equipment with each motor—all in good condition. O. L. Randall, P. O. Box 403, Sterling, Kans.

FOR SALE—SEVERAL THOUSAND bushels of Roanoke, Ogden, Clemson, JEW 45, Jackson, Dortchsoy and Black Wilson seed soybeans for sale. Gurley Seed Co., Phone 2303, Selma, N. C.

DEHYDRATING PLANT FOR Sale—Due to the growth of our feed manufacturing business, lack of space forces us to sell our dehydrating plant. All in good condition. Mellody Mills, Inc. Libertyville, Ill.

FOR SALE—STRONG & SCOTT Attrition burr mill, complete with oil switches. Also Brower two-ton mixer. Agriculture Service Store, Sibley, Iowa.

Fertilizer Merger

Consolidation of the American Plant Food Council, Inc., and the National Fertilizer Association was approved by the members of the Council at a special meeting, in the Mayflower Hotel, in Washington, D. C., Dec. 1.

The favorable vote by the Council membership constituted the final action in bringing together the two national trade associations which will become the National Plant Food Institute on July 1, 1955. NFA members approved the consolidation at Hollywood, Fla., on Nov. 11.

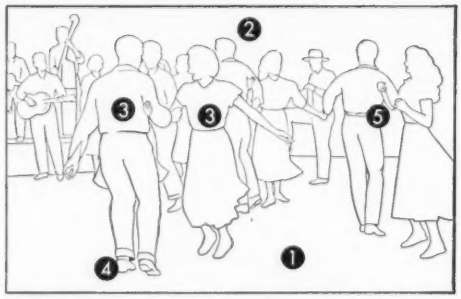


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This is just one example of what we at Cargill call Creative Processing . . . a constant effort to change things you raise into products millions of people want. Many basic grain crops like flaxseed, corn and soybeans have better markets today than ever before, because Creative Processing transforms them into plastics, printing ink, paint, cooking oil—hundreds of widely-used products, including the new improved feeds you use on your own farm.

Well over 75% of all farm products are processed before being eaten or used. And, Cargill Creative Processing helps increase America's appetite for these crops with 3 research laboratories, 18 control labs and a 400-acre research farm—all staffed by scientists and technicians who are ever seeking new and better ways to "eat up" the things you grow. (Some results of their work can be seen at right.)



Look closely—see how many of your farm products you can identify in the above photo. For example, that shiny (1) linoleum flooring was manufactured from linseed oil (creatively processed by Cargill's Oil Division). The (2) paint on the walls is another product made from linseed oil and your flaxseed. Chances are, too, that laundry starch (processed from corn) had much to do with the clean, neat appearance of those (3) shirts and blouses. (4) Shoes made from cowhide or other farm-produced leather. Even a (5) plastic belt, processed from your soybeans by Cargill's Soybean Oil Division.

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IN THE MARKETS

EXPORTS. Total exports of fats and oils during the year ending Oct. 1 set a new high of 3.4 billion pounds, Foreign Agricultural Service reports. The previous high was 2.3 billion in the year ending October 1952.

The record level of exports came about in large part because of substantial sales from stocks of cottonseed oil, linseed oil, flaxseed and peanuts held by Commodity Credit Corp. Sales were made at competitive world prices.

Cottonseed oil exports of nearly 400 million pounds were largest in 40 years. Linseed oil exports were highest of record, and flaxseed shipments the largest in 47 years.

U. S. exports of soybeans and soybean oil during the 1953-54 crop year totaled almost 46.4 million bushels on a soybean equivalent basis. This compares with 41.3 million bushels exported in 1952-53, but is 40 percent less than the record quantity of almost 79.2 million bushels exported in 1950-51. Exports of soybeans, as such, were at an alltime high of 39.5 million bushels. But exports of soybean oil (crude basis) at 72 million pounds were the lowest since the year 1944-45.

UNITED STATES: Exports of soybeans and soybean oil and total exports in soybean equivalent, crop years October-September 1952-1953 and 1953-1954

Country of destination	1952-1953 (1) Soybeans 1,000 bushels	Soybean oil (2) 1,000 pounds	Total soybean equivalent 1,000 bushels	1953-1954 (1) Soybeans 1,000 bushels	Soybean oil (2) 1,000 pounds	Total soybean equivalent 1,000 bushels
Canada	4,520	16,495	6,167	4,708	15,301	6,165
Cuba	(3)	4,088	408	(3)	3,258	310
Haiti	.....	789	79	.....	341	32
Mexico	(3)	23	3	.....	192	18
Netherlands Antilles	.....	100	10	.....	31	3
Panama, Republic of	.....	244	24	.....	170	16
Chile	.....	.....	.....	.....	278	25
Colombia	.....	1,426	142	.....	32	3
Venezuela	.....	21	2	.....	148	14
Austria	.....	(4) 4,458	(4) 445	.....	.....	.....
Belgium-Luxembourg	1,058	856	1,143	674	903	760
Denmark	1,448	.....	1,448	612	.....	612
France	218	1,208	338	881	413	920
Germany, Western	1,595	28,623	4,451	4,821	19,992	6,725
Iceland	(3)	333	33	.....	268	26
Italy	.....	4,966	496	(3)	423	41
Netherlands	2,723	17,513	4,471	5,885	20,796	7,866
Norway	676	.....	676	559	.....	559
Switzerland	.....	3,349	334	20	5,784	571
United Kingdom	84	1,631	247	1,563	901	1,649
Yugoslavia	184	.....	184	.....	.....	.....
Hong Kong	4	6	4	261	.....	261
Israel	674	2,720	945	54	35	57
Japan	14,508	.....	14,508	16,021	35	16,024
Korea	526	.....	526	11	.....	11
Philippines	136	21	138	129	11	130
Taiwan (Formosa)	3,553	2,400	3,793	3,220	.....	3,220
Algeria	.....	1,674	167	22	119	33
Tangier	.....	127	13	.....	58	6
Other countries	1	1,494	151	57	(5) 2,516	(6) 298
Total	31,908	(4) 94,565	(4) 41,346	39,498	72,005	46,356

(1) Preliminary. (2) Crude and refined oil in terms of crude oil. (3) Less than 500 bushels. (4) Revised. (5) Includes 1,477,560 pounds to French Morocco. (6) Includes 140,720 bushels to French Morocco. Compiled from official sources.

UNITED STATES: Exports of selected fats, oils, and oilseeds for crop marketing years, beginning Oct. 1, 1952-53 and 1953-54

Commodity	Unit	1952-53	1953-54
Coconut oil (1)	1,000 lbs.	16,083	10,951
Cottonseed	1,000 lbs.	24,747	29,085
Cottonseed oil (1)	1,000 lbs.	50,672	397,793
Flaxseed	1,000 bu.	19	6,152
Linseed oil (1)	1,000 lbs.	4,040	430,272
Peanuts (2)	1,000 lbs.	2,337	168,578
Peanut oil (1)	1,000 lbs.	1,282	8,698
Soybeans	1,000 bu.	31,907	39,496
Soybean oil (1)	1,000 lbs.	93,404	71,258
Lard	1,000 lbs.	466,172	397,483
Tallow, edible	1,000 lbs.	14,765	21,953
Tallow and greases, inedible (3)	1,000 lbs.	1,070,177	1,185,755
Fish oils (4)	1,000 lbs.	92,059	157,443
All other (oil content)	1,000 lbs.	137,193	133,765
Total oil equivalent	1,000 lbs.	2,271,000	3,432,000

(1) The sum of crude and refined. (2) Includes shelled and unshelled peanuts. (3) Includes inedible tallow, animal greases and fats, and animal oils. (4) Includes fish oils, hydrogenated, and fish liver oils. Source: Compiled from official records of the Bureau of the Census. United States Department of Agriculture, Foreign Agricultural Service.



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FACTORY USE VEGETABLE OILS for September and October as reported by Bureau of the Census (1,000 lbs.)

FACTORY PRODUCTION AND CONSUMPTION, AND FACTORY AND WAREHOUSE STOCKS, OCTOBER 1954 - SEPTEMBER 1954

	Factory production		Factory consumption		Factory and warehouse stocks	
	October 1954	September 1954	October 1954	September 1954	Oct. 31 1954	Sept. 30 1954
Cottonseed, crude	219,744	*165,418	170,682	115,956	105,742	*70,954
Cottonseed, refd...	161,362	106,518	148,136	154,430	(1)817,314	825,377
Soybean, crude....	235,894	125,318	215,930	*159,065	91,115	73,503
Soybean, refined..	198,863	148,712	200,722	169,341	54,679	53,722
Coconut, crude.....	43,159	38,365	47,974	49,276	(2)52,343	(2)48,770
Coconut, refined..	30,698	32,933	27,433	28,770	10,318	9,982
Vegetable foots (100% basis)	20,957	18,211	12,807	13,227	49,066	44,312

*Revised. (1) Includes 729 million pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corp. This figure, as well as the comparable Sept. 30, 1954, figure of 768 million pounds, includes quantities sold for export by CCC but not "lifted." As of Oct. 31, CCC reported that it had removed from inventory and put in an "in-transit position to other storage" about 72 million pounds of refined cottonseed oil of which it is estimated that less than 10 million pounds have not been accounted for in respondent reports to the Census Bureau. (2) Data for stocks of crude coconut oil are on a commercial stocks basis and do not include figures for stock piles of strategic oils.

FACTORY CONSUMPTION OF VEGETABLE OILS, BY USES, DURING OCTOBER 1954

	Edible products			Inedible products				
	Shortening	Margarine	Other edible	Soap	Chemicals	Paint and varnish	Lubricants and greases	Other inedible
Cottonseed, refined	20,119	4,671	1,953	....	65	.....	....	90
Soybean, crude	.....	.....	.....	55	....	324	....	1,129
Soybean, refined	44,368	6,309	6,874	23	....	5,769	16	5,632
Hydrogenated cottonseed oil, edible	32,492	28,882	1,932	....	....	.....	....	.....
Hydrogenated soybean oil, edible	45,006	52,475	848	....	....	.....	....	.....
Fatty acid stock	.....	.....	.....	578	....	99	....	.....

PRICE SUPPORT. 1954-crop soybeans put under price support and loans outstanding as of Nov. 15 (1,000 bu.)

Quantity put under loan			Total quantity		Total put
Farm stored	Warehouse stored	Total	of loans outstanding(1)	Purchase agreements	under price support(2)
1,584	6,825	8,409	8,402	164	8,573

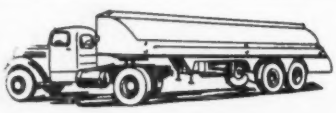
(1) The difference between the total quantity placed under loan and the total quantity outstanding is for all practical purposes the quantity redeemed. (2) Total placed under price support is the sum of the total put under loans and purchase agreements. Agricultural Marketing Service.

PRICES. Average price for soybeans received by farmers, effective parity price and price support rates (dollars per bu.)

Average farm price			Effective parity	Average price as percent of parity	National average price support rate	
Nov. 15 1953	Oct. 15 1954	Nov. 15 1954	Nov. 15 1954	Nov. 15 1954	1953 crop	1954 crop
2.60	254	2.57	2.79	92	2.56	2.22

Average farm and parity prices from crop reporting board.

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SUPPLY AND DISTRIBUTION of the 1953 and 1954 soybean crops, reported by Agricultural Marketing Service (1,000 bu.)

	1953-54	1954-55
Carryover (1)	10,137	1,327
Production	262,341	337,990
Total supply (2)	272,478	339,317
Farm use including seed for season	27,000	27,000
Quantity remaining for processing, export, or carryover	245,478	312,317
Disappearance through Oct. 31 (3)		
Crushed for oil or processed (4)	21,284	21,735
Exported	5,808	5,000
Total	27,092	26,735
Balance on Nov. 1 for processing, export or carryover	218,386	285,582

(1) Stocks as of Oct. 1. (2) Imports negligible. (3) October only. (4) No allowance is made for new crop crushings prior to Oct. 1.

INSPECTIONS. Soybeans, inspected by grades and percent, as reported by USDA's Agricultural Marketing Service.(1)

Grade	October 1953		September 1954		October 1954 (2)	
	1,000 bu.	Pct.	1,000 bu.	Pct.	1,000 bu.	Pct.
No. 1	20,413	28	4,499	20	9,021	18
No. 2	27,880	39	11,971	54	25,840	51
No. 3	10,038	14	3,394	15	11,064	22
No. 4	9,404	13	1,640	8	3,174	6
Sample	4,649	6	609	3	1,290	3
Total	72,384	100	22,113	100	50,389	100

(1) Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,750 bushels. (2) Of the October 1954 receipts, 4,700 bushels were black, 1,750 mixed, and the remainder yellow soybeans. Inspections of soybeans in October included 3,366,764 bushels as cargo lots, 1,607,995 bushels as truck receipts, and the balance as carlot receipts. Based on reports of inspections by licensed grain inspectors at all markets.

STOCKS. Agricultural Marketing Service's commercial grain stocks reports (1,000 bu.).

	Nov. 30	Dec. 7	Dec. 14	Dec. 21
U. S. Soybeans in Store and Afloat at Domestic Markets				
Atlantic Coast	2,059	1,697	1,805	1,705
Gulf Coast	1,684	2,219	2,456	2,304
Northwestern and Upper Lake....	264	267	196	170
Lower Lake	6,600	5,715	4,379	3,738
East Central	2,011	1,648	1,840	1,606
West Central, Southwestern & Western	1,004	1,045	931	831
Total current week	13,622	12,591	11,607	10,354
Total year ago	16,321	14,779	14,076	14,190
U. S. Soybeans in Store and Afloat at Canadian Markets				
Total current week	225	235	196	175
Total year ago	180	180	180	180
Total North American Commercial Soybean Stocks				
Current week	13,847	12,826	11,803	10,529
Year ago	16,501	14,959	14,256	14,370

SHORTENING. Standard Shortening shipments reported by the Institute of Shortening and Edible Oils, Inc., in pounds.

Nov. 27	4,632,911
Dec. 4	5,321,938
Dec. 11	5,054,971
Dec. 18	5,054,971

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Large acreage of New Clark Seed Beans. Adaptable to wide area.

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Farmer City, Ill. — **Tel 2185**

PROCESSING OPERATIONS. Reported by Bureau of the Census for October and November.

PRIMARY PRODUCTS, EXCEPT CRUDE OIL, AT CRUDE OIL MILL LOCATIONS: PRODUCTION, SHIPMENTS AND TRANSFERS, AND STOCKS, NOVEMBER 1954 - OCTOBER 1954

Products	Unit of measure	Production		Shipments and transfers		End of month stocks	
		Nov. 1954	Oct. 1954	Nov. 1954	Oct. 1954	Nov. 30 1954	Oct. 31 1954
Soybean:							
Cake and meal	tons	507,260	499,585	517,580	502,963	47,934	58,254
Lecithin	1000 lb.	2,268	2,043	2,306	2,112	1,593	1,631
Edible soy flour, full fat	tons	(1)	(1)	435	421	73	(1)
Edible soy flour, other	tons	5,284	6,696	5,054	6,376	1,205	975
Industrial soy flour	tons	6,246	3,469	6,385	(1)	1,260	1,399

(1) Not shown to avoid disclosure of figures for individual companies.

SOYBEANS: RECEIPTS, CRUSHINGS, AND STOCKS AT OIL MILLS, BY STATES, NOVEMBER 1954 - OCTOBER 1954
(Tons of 2,000 pounds)

State	Receipts at mills		Crushed or used		Stocks at mills	
	Nov. 1954	Oct. 1954	Nov. 1954	Oct. 1954	Nov. 30 1954	Oct. 31 1954
U. S.	1,068,777	1,494,883	665,920	652,059	1,522,213	1,119,356
Arkansas	31,833	52,269	7,889	11,139	68,997	45,053
Illinois	299,456	620,246	278,765	266,087	517,113	496,422
Indiana	106,604	181,429	64,501	72,820	190,659	148,556
Iowa	207,046	214,300	114,707	108,313	218,395	126,056
Kansas	(1)	17,052	(1)	(1)	(1)	(1)
Kentucky	(1)	(1)	16,471	17,190	(1)	(1)
Minnesota	50,226	47,719	40,941	37,784	20,359	11,074
Mississippi	7,682	46,641	12,072	11,675	46,467	50,857
Missouri	66,709	(1)	24,509	29,705	98,916	56,716
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	(1)	(1)	(1)	.....	5,019	1,179
Ohio	171,703	114,102	67,865	65,753	160,844	57,006
Oklahoma	(1)	(1)	.....	.....	(1)	(1)
All other	127,518	201,125	38,200	31,593	195,444	126,437

(1) Included in "All other" to avoid disclosure of figures for individual companies.

SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, NOVEMBER 1954 - OCTOBER 1954

State	Crude oil (thousand pounds)				Cake and meal (tons)			
	Production		Stocks		Production		Stocks	
	Nov. 1954	Oct. 1954	Nov. 30 1954	Oct. 31 1954	Nov. 1954	Oct. 1954	Nov. 30 1954	Oct. 31 1954
U. S.	239,625	235,894	25,758	28,915	507,260	499,585	47,934	58,254
Arkansas	2,372	3,284	407	1,510	6,288	8,719	6,394	7,158
Illinois	104,397	99,079	9,485	10,230	203,875	196,135	14,687	22,347
Indiana	23,548	27,217	1,584	2,191	50,345	56,989	4,586	(1)
Iowa	39,825	38,587	4,964	5,096	90,308	85,438	7,472	6,563
Kansas	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Kentucky	6,064	6,231	(1)	(1)	12,675	13,028	(1)	1,047
Minnesota	14,091	12,347	2,251	1,686	32,175	30,369	3,746	1,620
Mississippi	4,182	4,051	621	646	9,620	9,277	608	949
Missouri	8,672	10,737	1,444	2,095	18,802	23,235	1,346	2,309
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
N. Carolina	(1)	.....	(1)	(1)	(1)	.....	422	(1)
Ohio	23,631	23,644	1,821	2,726	53,057	51,252	3,297	4,159
All other	12,843	10,627	3,181	2,735	30,115	25,143	5,376	12,102

(1) Included in "All other" to avoid disclosure of figures for individual companies.

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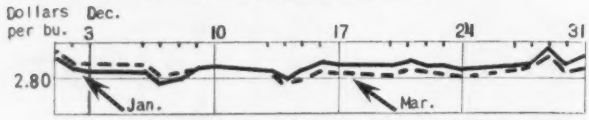

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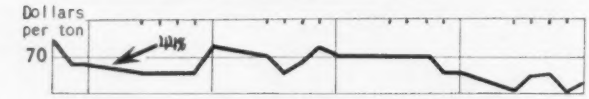
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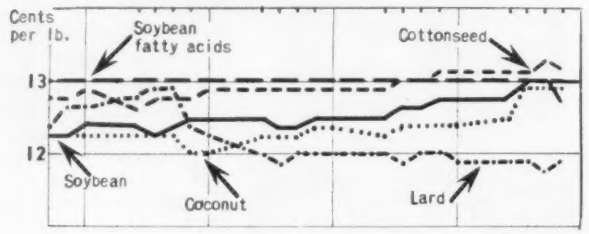
Futures No. 2 Soybeans, Chicago



Bulk Soybean Oil Meal, Decatur



Crude Vegetable Oils and Lard, Tankcars



December Markets

MARKETS were about in balance in December. The fact that the Department of Agriculture again raised its estimate of the 1954 soybean crop was offset by continued slow movement from the country. Beans and meal lost a little ground during the month.

Refiners entered the market to build up inventories which they had allowed to decline in recent weeks, and soybean oil showed increased strength.

Both meal and beans were selling under the levels of a year earlier, but oil ended the month above the year-earlier level.

There was some movement of northern beans south for export during December. One million bushels were reported bought in Chicago during a single week for export purposes. Lack of contract-grade beans in the South was reported to be a factor in this movement, with buyers purchasing northern beans for blending purposes. There were also sizable shipments of beans to Canada.

Soybean processors apparently were operating at or near capacity most places. The National Soybean Processors Association reported its members crushed 19.1 million bushels in November, which would indicate about normal operations.

Bearish influences:

1—The USDA crop report which raised the 1954 crop total 5 million bushels above November. USDA reports showed 285 million bushels on hand Nov. 1 for processing, export and carryover, as compared with 218 million bushels a year ago.

2—Fear of large supplies in the country and expectations in some quarters of a heavier movement in January.

3—A disappointing demand for meal. However, there were reports of improvement in call for mixed feeds by Christmas week.

4—The government announcement lowering feed grain supports and rumors that supports on soybeans would also be lowered.

Bullish influences:

1—The fact that the burdensome U. S.-owned surplus stock of cottonseed oil which has been overhanging the world market has melted away.

2—Optimistic reports from abroad with increasing world consumption of fats and oils.

There were reports that recent soybean prices have curbed a much broader export movement and that Europeans have been buying cottonseed oil.

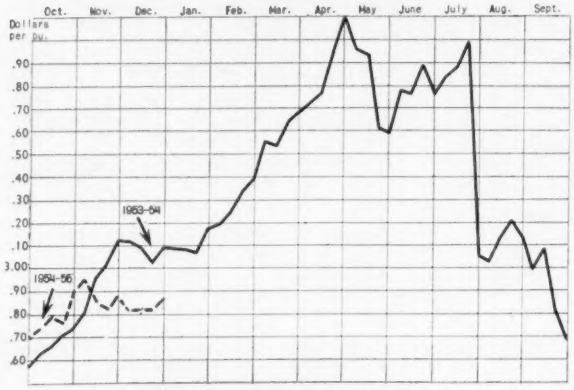
Export sales to Japan, Formosa, Denmark, Holland, France and Norway were reported during the month. Germany was reported to have bought 500,000 bushels of Manchurian soybeans.

There were reports that domestic consumption of soybean oil has suffered due to the competition of lard and cottonseed oil, and that shortening manufacturers have switched to lard. But most trade sources reported a good movement of soybean oil, with the refineries stocking up.

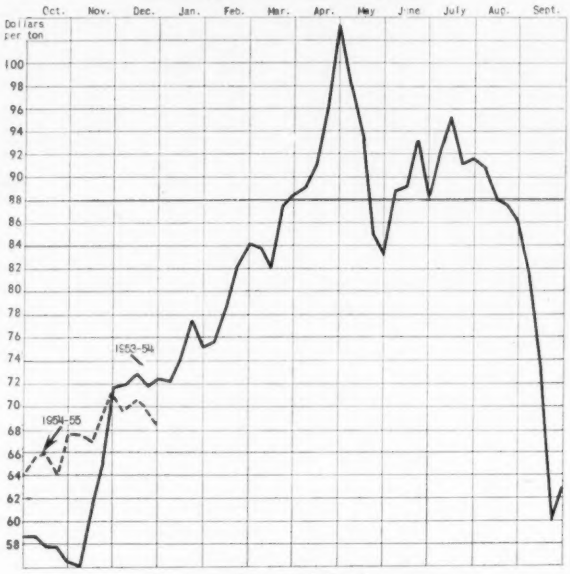
Agricultural Marketing Service reported 19.3 million bushels of soybeans inspected for export in the Oct. 1-Dec. 17 period, as compared with 18.1 million during the same period last year.

TRENDS AT A GLANCE (Friday prices)

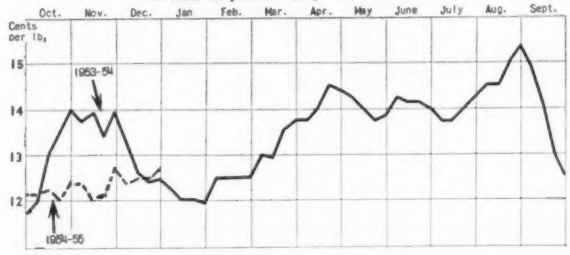
Near Futures Soybeans, Chicago

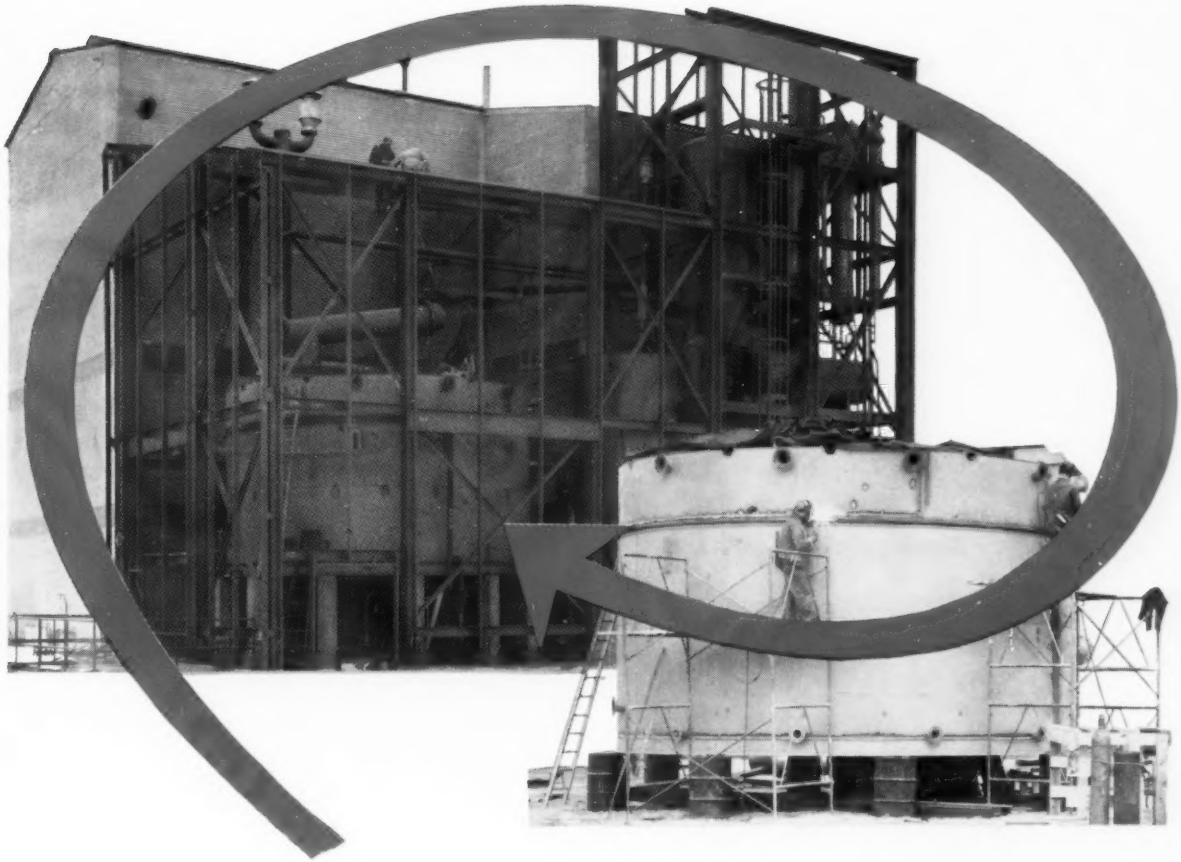


Bulk Soybean Oil Meal, Decatur



Crude Soybean Oil, Tankcars





BLAW-KNOX puts the skids under a hazardous project to increase Honeymead's capacity

The problem at Honeymead Products Company was . . . how to add solvent extraction facilities, by assembling and welding metal equipment, to an operating plant using volatile, inflammable solvent.

Honeymead is a fast-growing Minnesota producer of soy oil and meal. Extraction of oil from soybean flakes requires the use of hexane solvent. Cutting, welding and assembling the world's largest Rotocel extractor and integrating it with the existing vapor-filled equipment without interrupting operations necessitated a unique engineering approach.

Blaw-Knox fabricated the 500 ton per day Rotocel, 24 feet in diameter, and distillation equipment four stories in height at a safe distance. As each unit was completed, it was lowered onto cribbing and skidded carefully into place.

Eight months from the start of this project, tie-in of the new facilities with the existing meal-preparation equipment was completed. Integration of these facilities, start-up, test runs and adjustments were completed in two weeks—procedures normally requiring a month. This rapid conversion saved the firm many thousands of dollars.

The solution to Honeymead's problem was the unified design, engineering and construction of equipment, and, more important, a method of operation which enabled the company to maintain the income from its existing plant almost entirely throughout the period of construction.

This is the type of thinking you can expect from Blaw-Knox. Put it to work on your next project. Call Blaw-Knox early in the planning stages.

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